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A study of teacher beliefs and pedagogical practices relating to gifted and talented education in selected primary schools in England and Scotland.

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In loving memory of my late grandparents, Mimis and Dery.

Η μνήμη,

κύριο όνομα των θλίψεων,

ενικού αριθμού,

μόνον ενικού αριθμού

και άκλιτη.

Η μνήμη, η μνήμη, η μνήμη.

(Πληθυντικός αριθμός, Κική Δημουλά)

To my beloved Marios and Dimitris who have been a constant source of loving support throughout my PhD experience

Μου φτάνει που μ' αγαπάνε τέσσερις άνθρωποι.

Πολύ…

Μου φτάνει που αγαπάω τέσσερις ανθρώπους.

Πολύ…

Που ξοδεύω τις ανάσες μου μόνο γι' αυτούς.

Που δεν φοβάμαι να θυμάμαι.

Που δε με νοιάζει να με θυμούνται.

Που μπορώ και κλαίω ακόμα.

(Στην απλότητα κρύβεται η ευτυχία, Οδυσσέας Ελύτης)

Declaration

I declare that this thesis was composed by myself, that the work contained herein is my own, except where explicitly stated otherwise in the text, and that it has not been submitted for any other degree or professional qualification except as specified.

Esthir Tzivelopoulou

Abstract

Educational provision for gifted and talented pupils in primary schools is under-researched and so far an empirical study investigating pedagogical practices for gifted and talented pupils in both England and Scotland has not taken place. The aim of this thesis is to investigate how selected primary schools in Scotland and England have approached the development of policy and practice for the educational provision of gifted and talented pupils, by exploring how primary practitioners conceptualise giftedness, how they interpret and restructure national or local authority policy and what processes they follow to identify and provide for these pupils.

An analysis of the national policy background in these two jurisdictions preceded the empirical investigation of the approaches adopted in five selected schools. One independent and four state-funded schools were purposively selected taking into account the number of pupils enrolled, the amounts eligible for free school meals and pupils' achievements in literacy and numeracy in order to allow for meaningful comparisons to be drawn between each school and illuminate the topic studied from a variety of angles. Those schools' policies were investigated first and then each was case-studied for a period of approximately 15 days. Data were collected through various methods, namely semi-structured interviews with teachers and head teachers, teacher- and pupil-observations and analysis of relevant documents (e.g. self-assessment or external school reports, pupil assignments, photographs). The analysis of the data collected through multiple methods and from multiple perspectives facilitated the comprehension of the often contradictory values and beliefs regarding gifted and talented education expressed by participants.

The analysis of the data showed that there are considerable differences not only between schools but also within each case. Despite a heightened awareness of giftedness, teachers in this study still held stereotypic views about gifted and talented pupils (e.g. that they are privileged from nature and do not need additional support or that they have difficulties in their social life). Several teachers were reluctant to engage with the questions regarding the nature and terminology of giftedness, while teachers from the independent school rejected the concept of giftedness altogether. Identification of pupils as gifted and provision for their needs was very closely related

to ability grouping and setting practices. A number of teachers equated identification processes with the procedures they adopted in order to group their pupils 'homogeneously' and suggested that this is one of the most effective ways to cater for all pupils' needs, even though in many cases no differentiation of instruction or tasks was observed. The complex pattern of opinions about and attitudes towards gifted and talented pupils observed illuminates the degree to which teachers hold contradictory beliefs about the nature of giftedness and the dilemma to cater either for the 'more vulnerable' or the more 'privileged' pupils' needs

Lay Summary

The aim of this thesis is to investigate how selected primary schools in Scotland and England have interpreted national or local authority guidelines for the provision of gifted and talented pupils and what steps they have taken to develop and apply relevant policies. It moreover aspires to explore how teachers and head teachers understand giftedness, what processes they follow to identify and provide for their gifted and talented pupils and how they view their role in catering for these pupils' needs. There has been limited relevant research investigating gifted and talented educational provision in primary schools, especially in Scotland and no relevant study in both England and Scotland.

Taking into account the number of pupils enrolled, the amounts eligible for free school meals and pupils' achievements in literacy and numeracy, I selected one independent and four state-funded schools to be studied. The differences and similarities between the selected schools enabled me to draw meaningful comparisons and shed light to the topic studied from various angles. Before entering the schools I studied the national policy background in these two jurisdictions and then investigated the selected schools' policies. I spent approximately 15 days in each school, observing lessons, interviewing teachers and head teachers and analysing school documents (e.g. assessment reposts and pupil assignments). The use of these methods allowed me to better understand teachers' often contradictory values and beliefs regarding gifted and talented pupils.

The analysis of the data showed that there are considerable differences in the ways teachers approach gifted and talented education not only across but also within schools. Despite a heightened awareness of giftedness, teachers in this study still expressed stereotypic opinions about gifted and talented pupils (e.g. that gifted pupils have difficulties making and retaining friends and that they are able to 'get on' with their work and therefore do not need much support). Some teachers avoided to discuss about the nature and terminology of giftedness and were reluctant to engage in a discussion about relevant policies, while teachers from the independent school argued that there is no such thing as a gifted and talented pupil and that all pupils have different gifts. Identification of and provision for gifted pupils was very closely associated with

ability grouping and setting practices in at least 3 of the schools. A number of teachers equated identification processes with the procedures they adopted in order to group their pupils by ability within class or in sets and suggested that this is one of the most effective ways to meet all pupils' needs, even though in many cases differentiation of teaching or exercises was not observed. The complex pattern of opinions about and attitudes towards gifted and talented pupils observed illuminates the degree to which teachers hold contradictory beliefs about the nature of giftedness and the dilemma to cater either for the 'more vulnerable' or the more 'privileged' pupils' needs.

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Contents

Introduction

Motivation

This piece of research was initiated as a result of the tensions experienced while I was working as a primary school teacher. I often struggled to be fair towards all my pupils and especially the 'more able' or gifted in my attempt to be supportive to those who had learning or behavioural difficulties. In discussions with colleagues both at school and at the university, I often met teachers who used some dramatic binaries to justify their unjust, in my opinion, treatment of gifted and talented pupils. The main argument was that you can/should either support the less able pupils or challenge the more able, and as there can be no question as to who 'needs' more support, they did not hesitate to focus on the former. Consequently, my main purpose in taking up this study was to explore teachers' perspectives about high ability and the ways gifted pupils should be and are treated in schools.

Moreover, in order to explore the topic from as many different angles as possible, I decided to conduct a study including schools from both England and Scotland, where there are significant policy and education aspiration differences. Indeed as it will be discussed in Chapter 4 mainly, these two jurisdictions, despite sharing common history and perhaps many cultural characteristics, have adopted distinct approaches to the education of gifted and talented or 'more able' pupils. Including as diverse cases as possible in my study, I believed, would illuminate differences and similarities not only across, but also within schools and would enable me to understand the ways teachers' constructions of ability might contradict or reflect relevant policies.

The role of policy in shaping my research aims

As Hamilton (2001) pointed out, 'policy struggles are not only present in the explicit debates of political rhetoric or in the implicit messages about ability within the documentation emerging from various parties' (p.1). On the contrary, as Ball (1994) argued, policy could be viewed as a problem presented to schools and individuals in order to find a resolution of some kind. It can even create an ongoing and irresolvable

'struggle', in greater or lesser degrees of dissonance and consonance, either between policy makers (or inspectors and LA officials) and schools, or between organisational and administrative aspects within schools, as well as between teachers and their colleagues, pupils and parents, even within individual classrooms (Hamilton, 2001).

Thus 'policy' in this thesis is not seen in a normative way, i.e. 'as the closed preserve of the formal government apparatus of policy making', but 'as involving negotiation, contestation and a struggle between competing groups, as a process than an output' (Ozga, 2000, p.42). Unless such a broad understanding of policy is embraced, then 'all the other moments in processes of policy and policy enactments that go in and around schools are marginalised or go unrecognised' (Ball, Maguire & Braun, 2012, p.2). As Braun et al. (2010) emphasised, most national or local (educational) authority policies are designed with the expectation that teachers will be familiar with them, keen to implement them, and they are therefore held accountable for this duty. Policy-makers are often unconscious of the 'complexity of policy enactment environments and the need for schools to simultaneously respond to multiple policy (and other) demands and expectations' (Braun, Maguire & Ball, 2010, p.548) and thus fail to recognise the significance of schools' 'unwritten' policies. In contrast, in this thesis, as school policies, I refer to both written and unwritten documents. The latter especially, despite not being set on paper may constitute and change educational practices.

Therefore my aim when exploring policies was twofold. First, to examine formal national or Local Authority policies relating to the education of gifted and talented pupils in order for me to and the reader to understand the policy background in these two jurisdictions and second, to explore how primary school teachers make sense of them, how they negotiate or struggle over them, how they sometimes ignore them and whether they generate relevant written or unwritten policies to embed aspects of them in their own ethos and working practices (Braun et al., 2010). In other words, starting point for this research was a review or relevant policies in order to set the background of this study, which then led into my empirical work under the form of case studies of five selected primary schools from England and Scotland, with the

purpose of understanding teacher beliefs and pedagogical practices for gifted and talented pupils, through interviews with school staff and classroom observations.

Finally, although policy has central role in this thesis, it should be noted here that this is not a study of policy. It is instead a study of teacher beliefs in the context of policy. Therefore at the core of my research are teachers' judgements and interpretations of policy and their beliefs about the ways gifted and talented pupils should be treated at school. This will be further clarified in Chapter 5, where my research design is detailed.

Structure of this thesis

Chapter 1 explores the various conceptualisations of giftedness and the ways they have shaped relevant policies internationally and especially within the EU. It also reports on relevant research about the characteristics of gifted and talented pupils and examines proposed models for their identification. Finally it discusses the significance of teachers' role in the understanding and provision for gifted and talented pupils. In **Chapter 2**, the approaches to educational provision for gifted and talented learners are discussed as an extension to the debate about the conceptualisation of giftedness explored on the previous chapter. **Chapter 3**, focuses on grouping and seating arrangements, examining research on the effectiveness of each type, the implications they may have on gifted and talented pupils and the approaches adopted by the jurisdictions within the UK. **Chapter 4**, looks through influential European policies for the education of gifted and talented pupils and focuses on the review of England and Scotland's approaches.

In **Chapter 5** the research methodology is outlined, through a detailed discussion of my research aims and questions as well as my theoretical orientation and the ways they shaped my research design. Moreover, the validity and reliability of this piece of research, the ethical considerations and reflexivity of the researcher are carefully considered.

In **Chapter 6**, a comprehensive description of each of my case-schools is given, preceding a more detailed presentation and discussion of my findings in the

following chapters. Next, **Chapter 7** focuses on the terminology and definitions proposed by teachers as well as their views on the debate about the nature of ability and identification of gifted and talented pupils. **Chapter 8** examines teachers' 'sense of justice' as well as the challenges they face and their views on national and school policies. The two following chapters deal with teachers views about the provision for these pupils' needs, exploring their opinions about 'challenge' and differentiation (**Chapter 9**), 'different opportunities', 'peer teaching' and some secondary forms of provision (**Chapter 10**). **Chapter 11** looks at the ways teachers group their pupils, their reasoning behind the approach adopted, their allocation procedures, the ways pupils are monitored and allowed to move from one group or set to another and, last, pupils' awareness of and opinions about these practices.

Finally, in **Chapter 12**, I draw attention to the ways my research questions were answered through this study and then discuss the possible implications for practice and policy, highlighting the study's limitations and making some concluding recommendations for future research.

Chapter 1 Conceptualisation of Giftedness

Gifted and talented individuals consist a significant part of every society (Matsagouras, 2008), but usually their educational needs are neglected in schools. The majority of gifted and talented pupils universally, are never identified as such or are at best identified very late in their lives and consequently lack the special care and provision they need in order to 'fulfil' their potential (Koshy & Robinson, 2006; Peterson & Colangelo, 1996; Roberston, 1991; Saranli, 2016; Webb, 2014). Although 'giftedness' and 'underachievement' seem to be a paradox, in fact studies have showed that an amount of up to 50% of gifted pupils underachieve (Hoover-Schultz, 2005). Astonishingly, this is a phenomenon that can be observed even in countries where specific programmes for the provision of the gifted and talented have been established (Evelthontos, 2008).

In this chapter the debate surrounding the concept of giftedness and its implications for education practice will be addressed. Specifically, the various definitions of giftedness as well as the impact they may have on policy implementation and provision for the gifted and talented will be discussed. Afterwards, an attempt to outline some of the characteristics researchers attribute to gifted children will be made; then the debate about the most effective identification process will be addressed and the possible consequences of labelling children as gifted will be examined. Finally, the significance of teachers' beliefs and understanding of giftedness in the identification and provision for gifted and talented pupils will be discussed.

1.1 Defining giftedness

Addressing the National Academy for Gifted Children (NAGC), its president in 2008, Siegle, highlighted the implications the lack of a conceded definition of giftedness has on the issue of gifted education. As he emphasised, 'it is difficult to lobby for support for a group that cannot be defined or counted. Legislatures are reluctant to fund gifted education when the response to the question about the number of gifted children is "We do not know," which is followed by another "We do not know" when we are asked which children are gifted.' (Siegle, 2008, p.111). As Matsagouras (2008) mentioned, there are educational, scientific, ethical and political

questions involved in the issue of education for the gifted and talented pupils. Specifically, there is the question of the nature of intelligence and whether it is equally distributed among the various social groups, the question of whether gifted pupils need special care and provision and the ethical question of whether the teacher should pay less attention to those pupils' needs and focus on the ones with learning or developmental disabilities. The political questions as to whether education as a social institution should strive for excellence or equity and whether equity means equal learning outcomes or the right to equal opportunities are also very significant (Matsagouras, 2008). The complexity and multi-dimensionality of the issue is further illustrated by Renzulli and Reis's (2002) statement that "gifted education represents a spectrum of ideologies that exists along a continuum ranging from conservative to liberal points of view" is justified (p.2).

Revealing of the diversity of theories about giftedness is also the fact that entire handbooks have been devoted to its definition, for example Sternberg and Davidson's (2005) 'Conceptions of Giftedness' (Makel, Snyder, Thomas, Malone & Putallaz, 2015). As a result, teachers share different perceptions of giftedness across and even within cultures. For example, across the USA there are several national and school definitions of gifted and talented and the amount of gifted pupils identified by their teachers varies between 5 and 10 per cent (Freeman, 2005). Researchers in this field have bemoaned the lack of consensus on an agreed general definition of giftedness (e.g. Carman, 2013). As Coleman (2004) stressed, "The necessity for a definition is non-debatable. A field cannot have any coherence without common understanding about the limits of the phenomenon" (p. 10). Despite all the above, it is still quite astonishing that there are more than 50 terms available to describe the group of 'gifted and talented' individuals. Each term defines them in a different way and refers to children's intelligence or creativity, and usually to their school achievement too (Matsagouras, 2008). Many authors have attempted to address the question of giftedness and have been driven to different conclusions. In the next paragraphs a brief review of some influential intelligence theories will be followed by an attempt to summarise the most significant conceptions of giftedness.

Over the last decades there has been intense debate over the nature of intelligence. Even though some of the earliest attempts to define intelligence date back ages ago, there is still no consensus on a single definition of intelligence (Sternberg, 1990). Probably one of the most important attempts of the last century to discuss the nature of intelligence can be identified in the Pittsburgh symposium, where the main aim, as expressed by Resnick (1976), was to consider what is intelligence rather than who has it (Neisser, 1979). A popular definition of intelligence, as proposed by Sternberg in 1997, is the following: "Intelligence comprises the mental abilities necessary for adaptation to, as well as shaping and selection of, any environmental context" (p.1). This definition, quoted here, is flexible and thus valuable to educators, because as the environmental context is subject to change over time, adaptation to this context is inextricably linked with a process of lifelong learning (Sternberg, 1997). More recently, Asbury and Plomin (2014) have taken a rather conciliatory view on intelligence, following their Twins' Early Development Study (TEDS). As they have argued:

> *'IQ is a useful but not perfect predictor of achievement; it is not very heritable when children are young but becomes increasingly so as they go through school and enter adult life. Achievement is also influenced by genes and this remains true when we remove the effects of IQ. Self-confidence predicts achievement to a lesser extent than IQ but is a significant influence nonetheless and, contrary to popular belief, it is influenced by nature as much as it is by nurture. So bright, confident kids tend to do well at school for both genetic and environmental reasons.' (p.100)*

The debate about intelligence has, quite naturally, shaped the debate about giftedness. In the same way as our conceptions of intelligence have changed over the years, our understanding of giftedness as well as our views about the aims of education have changed too. This change has caused considerable controversy regarding the definition of giftedness, the characteristics of 'gifted and talented' pupils and the most effective way to identify them and provide for them (Denton & Postlethwaite, 1985). What is more, things are even more complex because the field of education is multidimensional and there can hardly be a single answer to the various dilemmas

teachers are confronted with everyday especially in the heterogeneous modern classes (George & Rubin, 1992).

Terman and his colleagues' long-term study (1926) on gifted people in the US has been very influential as it was the first study in this field which defined giftedness as a concept very closely related to (high) intelligence. In their study, a very restrictive view of giftedness was adopted (Renzulli, 2002), the amount of pupils identified as gifted was only the top one per cent of the schools' population, 'as measured by the Stanford-Binet Intelligence Scale or comparable instrument' (Terman, 1926, p.43) and Terman was convinced that giftedness (as well as intelligence) is biologically determined (Mönks & Katzko, 2005). Later, Guildford's (1950) and Getzels and Jacksons's (1962) work introduced the idea of 'creativity' as an important component of giftedness which as they argued was overlooked by the IQ tests (Denton & Postlethwaite, 1985). However, the perspective of giftedness as an innate and generic quality that needs to be identified by cognitive assessments or IQ tests has concentrated most of research and policy attention and is still quite popular (Robinson, Zigler & Gallagher, 2000). This conception of giftedness further presumes that gifted individuals are gifted across all (academic) domains and will remain so throughout their lives, regardless of whether they achieve (Subotnik, Olszewski-Kubilius & Worell, 2011).

A second conception of giftedness is based on the beliefs that gifted individuals possess very high levels of intellectual abilities (IQ) and are qualitatively different from other people. One of their unique characteristics is presumed to be emotional fragility. Although this assumption has been questioned by several studies (e.g. Cross et al., 2008; Deary et al., 2009; França-Freitas, Del Prette & Del Prette, 2014; Shechtman & Silektor, 2012), still several educators adhere to it and propose that gifted pupils be treated in special programmes with ongoing socioemotional support (Gallagher, Smith & Merrotsy, 2011; Preckel, Baudson, Krolak-Schwerdt & Glock, 2015).

A third, very influential conception of giftedness was first introduced by Renzulli, in 1977, who highlighted the importance of factors other than intelligence or

academic ability, such as task persistence, motivation and creativity (Figure 1), which should be sought out and nurtured in schools. Renzulli and Reis (2002) made a helpful distinction between the various definitions of giftedness. They identified two broad categories: the 'schoolhouse giftedness' and the 'creative-productive'. The first category is related to abilities valued in traditional schools, is measured by IQ tests in order to select the gifted pupils to attend special programmes, and values the pupil's ability to acquire knowledge, store it effectively and retrieve it when needed. On the other hand, creative-productive giftedness values "the use and application of information (content) and thinking skills (process) in an integrated, inductive, and real-problem oriented manner" (Renzulli & Reis, 2002, p.5) and refers 'to the traits that inventors, designers, authors, artists, and others apply to selected areas of economic, cultural, and social capital' (Renzulli, 2012, p.152). Supporters of this approach value the importance of human potential in giftedness, which cannot be measured by intelligence tests (Renzulli, 2008). Although these two types of giftedness may seem mutually exclusive, as Renzulli (2012) argued, they are not, 'but the distinction is important because of the implications for the ways in which we develop gifted behaviours in educational settings' (p.152). Finally, as Subotnik and her colleagues (2011) pointed out, Renzulli's model introduced a movement away from a sole reliance on intellectual measures of ability, recognising the importance of psychosocial variables, and represented a 'conceptual alternative to existing ideas about what provisions should be made to potentially gifted children during the school years, although there was no special focus on the continued development of special talent into adulthood' (p.5). Similar conceptions of giftedness, which recognise achievements in other than the traditional cognitive domains, such as music, or art gradually became considered as equally important aspects of giftedness. For example, Sternberg's (1985) 'triarchic theory' "included componential, experimental and contextual elements" (Eyre, 1997a, p.5), while Mönks's (1992), (Figure 2) multi-factor model stressed the impact of the social environment, i.e. home, peers and school, in the transformation of potential into achievement (Mönks & Katzko, 2008). Finally, Gardner's (1983) (Figure 3) 'multiple intelligences model' broadened even further our concept of giftedness by suggesting that a child may excel in one area or subject and not necessarily in others (Eyre, 1997a).

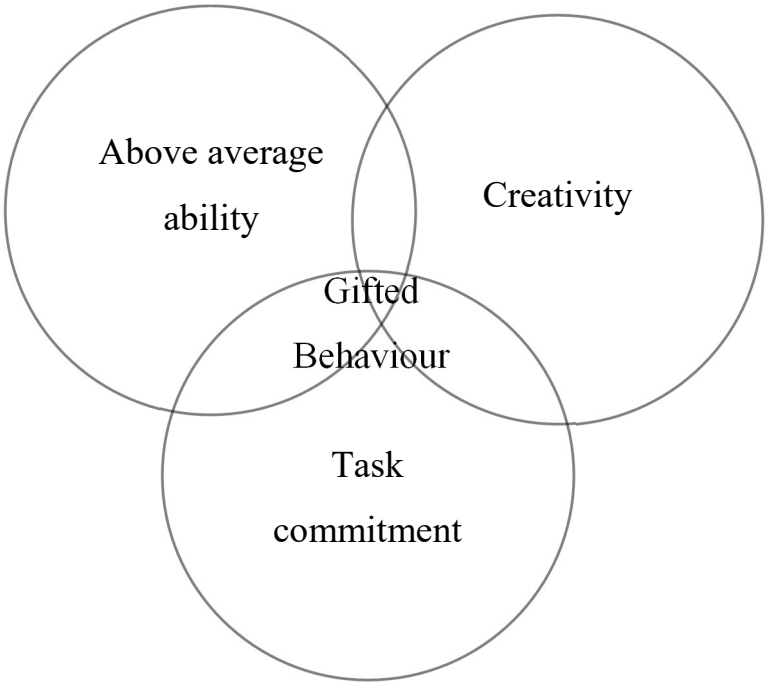

Figure 1: Renzulli's 'three-ring conception' (Eyre, 1997a).

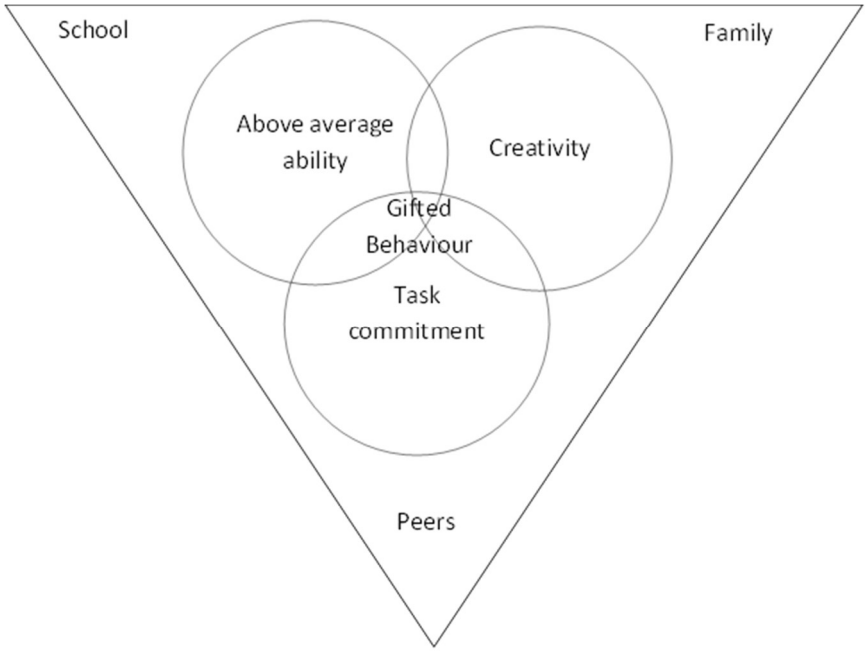

Figure 2: Mönks's (1992) multi-factor model (Mönks & Katzko, 2008)

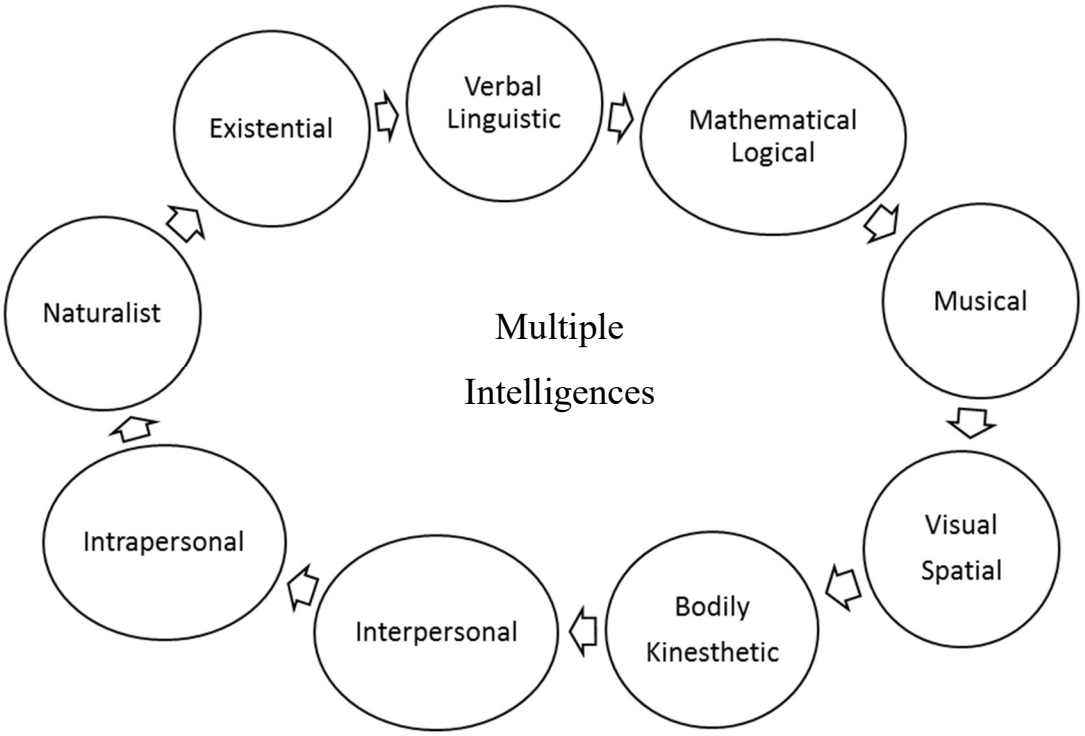

Figure 3: Gardner's (1983) Multiple Intelligences Model (Eyre, 1997a)

Another conception of giftedness which is in contrast to the above mentioned ones, rejects the role of ability altogether attributing instead exceptional performance to practice and 'unequal access to opportunities' (e.g. Amabile, 2001; Colvin, 2008; Ericsson, Krampe & Tesch-Römer, 1993; Ericsson, Prietula, & Cokely, 2007). Advocates of this conceptualisation of giftedness analysing 'experts' performances' have concluded that what was considered as innate ability is in fact the result of intense practice in combination with advantageous environmental factors (e.g. being offered suitable opportunities, supportive home environment, appropriate mentors/coaches etc.).

Recently, conceptions of giftedness with strong origins in developmental psychology have grown in popularity among researchers. I will refer to these theories more extensively in Chapter 2.1.

1.2 Characteristics of gifted and talented pupils

The lack of consensus on the term 'giftedness' has naturally resulted in a consequent lack of agreement about the characteristics of the gifted and talented pupils too. This group of students is considered as heterogeneous and thus various

characteristics may be attributed to them. What most researchers seem to agree to is that the characteristics they demonstrate are very intense and are related to a) general intellectual ability, b) specific academic achievement, c) creative-productive thinking, d) leadership skills, e) artistic expression and f) psychomotor skills (Matsagouras, 2008). It would be tempting at this point to present a checklist with some characteristics of the high ability pupils, but as Freeman (1981) argues, there is increased risk of extending these lists to include all the inevitable exceptions "until they become so all-embracing that they would describe almost any child" (in Denton & Postlethwaite, 1985, p.32). Nevertheless, it is useful, especially for the successful identification of these pupils that teachers have an awareness of some general characteristics gifted pupils exhibit. Broadly summarised, these characteristics could fall in one or all of the three following categories: 1) cognitive, 2) affective or non-cognitive and 3) atypical characteristics. The two first especially, usually emerge in classroom behaviour and it is thus more straightforward for teachers to observe them (Manning, 2006). In the following paragraphs I will attempt to summarise some of the characteristics of these three categories.

First of all, cognitive characteristics or intellectual abilities are those which are more commonly accepted by most educators of the gifted and talented (e.g. Kuncel, Hezlett & Ones, 2004; Simonton & Song, 2009). These, as it will be discussed in the next section, are usually assessed with intelligence or achievement tests (Brown, Renzulli, Gubbins, Siegle, Zhang & Chen, 2005). The relevant debate, however, has been inconclusive as to whether differences in ability 'are *causally* related to outstanding performance in the future and whether differences in ability are innate' (Subotnik et al., 2011, p.13). Some of the most generally agreed upon cognitive characteristics are the following: high levels of (early) verbal ability and language development, the ability to process and retain large amounts of information, varied and often intense curiosity, abstract thinking at an earlier age than peers, flexible and accelerated thought processes, advanced analytical skills, high mathematical ability and early problem solving skills, originality of thought, a preference for challenging and complex work, the ability to comprehend materials at advanced levels, persistency and goal-orientation in topics of interest and early appreciation of humour (Heller,

2004; Koshy & Robinson, 2006; Kuo, Maker, Su & Hu, 2010; Manning, 2006). In practice, despite criticisms against them, schools still rely on cognitive/achievement tests to identify children as gifted or to select students for educational or vocational purposes in the belief that test scores predict future outcomes (Subotnik et al., 2011). However, the view adopted here, in line with the 'Talent Development Framework' (see Chapter 2.1), is that '*general ability is necessary but not sufficient to explain optimal performance or creative productivity*. *It remains a component of talent development along with domain specific abilities, psychosocial skills, motivation, and opportunity'* (Subotnik et al., 2011, p.14).

Secondly, there is more divergence regarding the non-cognitive or affective characteristics gifted and talented pupils may display. These are not easy to spot with achievement or intelligence tests. (Long term) observations however, or interviews with children enable teachers to detect these characteristics and better understand their pupils' behaviour in the classroom. For example, a gifted pupil's desire to share knowledge may be perceived as boastfulness and may give rise to peer animosity and rejection. Similarly, a gifted child's perfectionism may often result in personal dissatisfaction and even feelings of hopelessness (Manning, 2006). Such traits can be the following: perfectionism, a subtle sense of humour, heightened sensitivity to others' feelings, self-awareness, mature understanding of emotions, high expectations of self and others, high levels of (moral) justice at an early age, a strong need for consistency in people's behaviours and a need for social acceptance (Manning, 2006; Stormant, Stebbins & Holliday, 2001). Kuncel and Hezlett (2010) reviewing evidence on the relationship between cognitive tests and performance, concluded that only personality traits, habits and attitudes can effectively predict achievement.

It is noteworthy that the characteristics described in the two previous paragraphs are not exhaustive and given that every gifted child is different, they will not necessarily display all of these characteristics. What is more, there are some gifted children, such as those who due to economic or social disadvantages do not manifest gifted behaviour as evidently as others, who according to Manning (2006) exhibit their giftedness in an atypical way: 'These children have the same general abilities as many gifted students. Yet, because of cultural differences or lack of early experiences, they

may not display the typical characteristics of intellectually gifted students that often are considered by teachers when making referrals to gifted education programs.' (Manning, 2006, p.67). It is therefore, even more important for teachers to be aware of these characteristics, as research evidence has repeatedly reported that intelligence tests miss these pupils and teachers often fail to identify them as gifted (Siegle, Moore, Mann & Wilson, 2010). Atypical characteristics can be the following: 'strong motivation and inner will, appreciation of cultural diversity, heightened sensitivity to each other and the world around them, realistic aspirations, and independence' (Hebert and Reis 1999, p.450), resilience to overcome adversity, leadership skills and independent thinking (Manning, 2006).

Furthermore, there are two sub-groups of the gifted population with distinct characteristics: the 'underachievers' or the 'non-producers' and the 'twice exceptional'. According to Ford and Thomas (1997), underachievers are, broadly speaking, the pupils who demonstrate a considerable discrepancy between their abilities and their performance. Unlike most researchers in the field, Freeman (1995) draws a distinction between gifted underachievers and non-producers, stating that underachievers may be emotionally distressed possibly due to low self-esteem, while "non-producers are psychologically healthy, but nonconforming and confident of their capabilities" (p.541). When identifying gifted and talented pupils it is important that teachers should be particularly alerted to those pupils' unusual characteristics, because they often fail to be spotted by achievement tests and teachers' nominations (Matsaggouras, 2008). Although the term 'gifted underachievement' appears oxymoronic, the overall amount of gifted underachievers has been estimated by some researchers as reaching the amount of 20% (Ford & Thomas, 1997). Nevertheless, some ethnic and social groups are more likely to underachieve and be overlooked when selecting pupils for gifted programmes. For example, Black African American students are amongst those most frequently underachieving. Ford's (1995) study in the US found that 40% of African-American students underachieve. Other vulnerable groups are Hispanic Americans, children with learning difficulties, otherwise labelled as twice-exceptional, children from deprived homes and adolescent women (Ford & Thomas, 1997; Hébert & Reis, 1999; Stormont, Stebbins & Holliday, 2001). Ford and

Thomas (1997) summarised the aspects affecting underachievement as: 1. Sociopsychological, 2. Family related, and 3. School related factors. The first category includes factors such as low self-esteem or low academic and social self-concepts. Minority pupils hostile to the achievement ideology, 'who believe that glass ceilings and injustices will hinder their achievement, are not likely to work to their potential in school' (Ford & Thomas, 1997, p.3). The second category includes factors such as parental pessimism and feelings of helplessness, unclear and unrealistic expectations and limited parental assertiveness and involvement in their children's education. Finally, some factors encompassed in the third category are: negative teacher-pupil relations, too competitive school climate and less supportive classroom environment (Ford & Thomas, 1997).

Identifying gifted underachievers is very challenging, since they are a diverse population and there is abundance of descriptions or lists of their 'common characteristics'. Reis and McCoach (2000) underlined that 'The psychological characteristics ascribed to gifted underachievers vary and sometimes contradict each other. The plethora of definitions and identification methods contribute to the difficulty in studying the characteristics of this population' (p.166). These drawbacks naturally hinder any attempts to seek suitable interventions. In order to minimise and reverse underachievement among minority gifted pupils, intensive effort is required on behalf of teachers and counsellors in partnership with parents and pupils at the youngest age possible (Peterson & Colangelo, 1996). Interventions must be tailored to individual underachieving pupils' needs, taking into account all the factors described in the previous paragraph (Ford & Thomas, 1997).

The twice-exceptional children are those gifted pupils who also experience learning, physical or behavioural problems. Although they too usually underachieve in school, current research treats them as separate from and unrelated to the group of gifted underachievers. As Reis and McCoach (2000) emphasise, 'Distinguishing between a chronic underachiever and a gifted student who has processing deficits, learning disabilities, or attention deficits is crucial because the interventions that are appropriate for these subgroups may be radically different.' (p.163). Although it might be conjectured that their giftedness would serve as a protective factor, lessening their

underachievement and shielding them from socio-emotional problems, research indicates that it serves as an additional risk factors for pupils with learning difficulties (Stormant et al., 2001). These pupils need professional support in order to be able to reconcile their perceived failure and frustration about their difficulties. It is very important for parents and teachers to encourage them to persist in challenging activities and overcome their fear of failure. They should also teach twice-exceptional children specific coping skills to enable them to cope with stress and frustration due to unreasonably high expectations. Last but not least, professionals should support these pupils establish and maintain friendships by increasing their opportunities to interact with peers in the classroom and demonstrating appropriate skills when necessary (Stormont et al., 2001).

1.3 Identification

The identification of gifted and talented pupils is both a very difficult and crucial process. The lack of agreement around the terminology of giftedness and those pupils' characteristics renders it difficult to reach a consensus about the most effective identification process (Reis & Renzulli, 2010). What is more, 'bright' pupils are often mistaken for gifted, while 'underachievers' are misidentified (Matsagouras & Dougali, 2009). Furthermore, research evidence has frequently reported that middle class children are more likely to be identified as gifted than children from a poor socio-economical background, single-parent families or 'looked-after' children (Eyre, 2009). Therefore, as Eyre (1997a) underlines:

> *'partial or inaccurate identification may in fact be more harmful than no identification, since pupils may be actively excluded rather than passively ignored' (p.11).*

Identification of gifted and talented pupils varies vastly around the world. Some schools identify pupils using only intelligence or performance tests, others use inventories, nominations or even self-reports and others use a combination of these processes (Mandelman, Tan, Aljughaiman & Grigorenko, 2010). This huge discrepancy can be partially blamed on the fact that even those educational systems which advocate for the provision of gifted and talented pupils' needs tend to be very vague in their guidelines for identification. However, if a school promotes gifted

educational practices, it needs to make decisions on how to identify the pupils to whom these practices will be available (ibid.).

Some general considerations that schools and educators should take into account before developing their identification policies, as proposed by relevant literature, are worth mentioning here. First of all, as Heller (2004) suggested, educators should determine the reasons for and the purposes of the unfolding selection. That is to say what kinds of pedagogical programmes will be offered to gifted and talented pupils and how inclusive they will be. Numerous models of provision for the gifted and talented pupils exist around the world, varying from enrichment programmes, to competitions, special schools or classes and after school or summer programmes (Mandelman et al., 2010). These will be described at greater length on the following chapter. Secondly, the underlying paradigm of giftedness (definition, characteristics etc.) which drives the school's commitment to provide for these pupils should be clearly established (Heller, 2005; Heller, 2004). Next, the most suitable identification process should be conceived. As it was mentioned earlier (2.1), in the past giftedness was seen as basically identical to the g-factor of the Terman tradition (Sternberg & Davidson, 2005) and thus identification of gifted pupils was based exclusively on intelligence or performance tests. Nowadays, however, theories supporting the combination of multiple criteria, methods and informants have gained ground (VanTassel-Baska, Feng & De Brux, 2007). Finally, with regard to the question of when gifted children should be identified, some researchers argue in favour of as early an identification as possible (at preschool or early primary school age), while others argue in favour of a sporadic or continual identification (Heller, 2004). As Heller (2004) highlights, the question of when identification should be attempted 'loses its force when one decides on continual diagnosis/prognosis which accompanies personality development (p.314). The major advantage of this view is that, 'misdiagnoses of giftedness can be recognized early so that a continuous adjustment to the individual's needs of practical support measures is possible' (ibid, p.314). This is in line with those definitions of giftedness which conceive it as a developmental process determined by both a genetic potential and the strong influence of environmental conditions.

Summarising the various identification processes, two broad categories emerge: 'the objective' and 'subjective'. The first includes techniques based on intelligence or other achievement tests and is usually adopted by those who believe that giftedness is a hereditary characteristic and therefore needs only to be accurately spotted (Sputnik et al., 2011). Usually a 10% of pupils' population scoring above 120 in Wechsler Intelligence Scale for Children (WISC) is identified as highly able. Subjective techniques though, are more associated with teacher identification of pupil's potential and thus with the 'creative- productive' model of giftedness. A wider range of abilities are considered in this case, not only achievement in academic fields but also creativity, critical thinking, leadership etc. (Renzulli & Reis, 2002). In the following paragraphs I will attempt to outline the main advantages and disadvantages of these processes.

Historically, the 'objective' identification of gifted pupils has been linked to tests and more specifically, IQ tests. This tradition of measuring IQ to determine one's ability was mainly favoured by psychologists and educators following Terman's development of the Stanford-Binet Intelligence Scale (Brown et al., 2005). Terman, as it has already been mentioned, offered his hypothesis (based on longitudinal studies) that gifted and talented pupils are the top 1% of the population, scoring at least 135 on the Stanford-Binet scale. Numbers became the determining factor of what pupils could achieve in school. Naturally, using an objective approach to evaluate abilities is comfortable. Schools using these methods are able to determine who their gifted and talented pupils are from day one by simply applying a (psychometric) test. However, this level of comfort was often questioned when remarkable differences between pupils' academic achievements and what the tests had predicted were observed. As Brown et al. (2005) argued, 'the realization was that the prophecy of the numbers was really just for future numbers on the same or similar tests' (p.76). What is more, such conventional ability tests focus on analytical or memory-based abilities excluding usually the identification of practical or creative abilities and are favoured by those who adopt a rather restrictive view of giftedness (a person is either gifted or not, giftedness is static etc.) (Renzulli, 2012; Sternberg, 2009). Furthermore, as Sternberg (2009) underlined, middle- and upper middle class children usually excel in memory

and analytical skills, which is why there is test scores are often associated with socioeconomic class. And even though there may be exceptions, this system on the whole is geared to favour those pupils who have had opportunities to develop these skills from early on in their life. Also, so-called traditional learners tend to achieve higher in these tests. Therefore, according to Sternberg (2009): 'testing has the potential advantage of creating equity by admitting students because of their abilities and achievements, and the potential disadvantage of destroying equity by favouring, on bases other than abilities and achievements, some groups of students over others'(p.328). Nowadays, intelligence tests continue to be very popular and are developed to inform parents, teachers, psychologists, policy makers and the general public around the world about children's or adults' characteristics. What is more, even where traditional intelligence tests are not used, standardised tests or school assessments tend to replace them. As Sternberg (2009) argued, these alternatives usually emphasise memory-based and analytical skills, in the same way as intelligence tests do. For example, the A-Levels used in England for college admissions measure pupils' ability to recall knowledge learned in secondary schools and their ability to do a basic analysis of that knowledge.

The 'subjective' identification processes unlike the 'objective' ones do not focus so much on pupils' (general) intelligence which should be measured in order to determine what opportunities to provide them with. Instead, they focus mainly on pupils' personality types and any socio-cultural conditions which may influence giftedness. In this identification paradigm, the role of teachers, parents and even children themselves is more prominent than intelligence or performance tests. All these informants are believed to be in a better position to offer valuable information about children's learning and personality types, thus enabling educators to shape teaching accordingly (Heller, 2005). Such informants are also considered able to identify gifted pupils from disadvantaged or culturally diverse backgrounds, who are usually missed by intelligence tests (Baldwin, 2002). Furthermore, they are able to take into account abilities in other domains apart from language and mathematics where intelligence tests focus, as well as non-cognitive skills and evaluate children's creativity, musical or sports talents, leadership skills etc. (Wellisch & Brown, 2012). Some of the most

common so-called ‘subjective’ tools for the identification of gifted and talented pupils are checklists with agreed upon characteristics by the school community, parent or teacher observations, use of portfolios of pupils’ achievements and interviews (Renzulli, 1990; Sutherland, 2003; Worrell & Erwin, 2011). Nevertheless, several arguments have been raised against the exclusive use of ‘subjective’ identification methods. Most importantly, it has been argued that this approach to identification of gifted pupils is too subjective and personal, and there will be huge discrepancy not only within countries and districts but even within schools on who is to be identified as gifted and talented. Since, no one person agrees totally with another, different aspects of giftedness will be valued, depending on the opinions of the person responsible for the identification. What is more, it has been argued that this approach to identification cannot be systematic due to its very flexible and arguably vague character (Delisle, 2003). Finally, teachers and parents’ ability to effectively identify gifted and talented pupils have often been questioned (Pegnato & Birch, 1959, Siegle et al., 2010; Speirs Neumeister, Adams, Pierce, Cassady & Dixon, 2007). This will be addressed in greater depth later.

Nowadays, in an attempt to bridge the two diametrically different approaches described above, some identification processes use a synthetic approach, where both information from psychometric tests and nominations from teachers, parents and pupils are used to determine who are gifted and talented (Hartas, Lindsay & Muijs, 2008; Heller, 2007; Mandelman et al., 2010). In most cases, some form of testing is used, varying from intelligence tests to ongoing assessments designed by individual teachers. Additionally, an array of non-cognitive indicators are taken into account; for example, personality traits or learning styles. To evaluate these, checklists, records of achievement, teacher and parent observations and pupil self- and peer evaluation are some of the methods that have been proposed (Sutherland, 2003). As it was argued above, input from several informants (parents, teachers, pupils) can be very illuminating regarding pupils’ non-cognitive abilities. It has been reported, for example, that parents and teachers’ information about children’s motivation and leadership skills are more accurate than information they provide about their intelligence and creativity (Chan, 2000). Several arguments have been raised in favour

of such an approach to gifted and talented identification. Firstly, this approach is in line with the conceptions of giftedness as multidimensional (see previous section) and it is therefore logical that a variety of methods are needed to measure different abilities or aspects of personality which allow giftedness to sustain over time (Sternberg, 2009). Secondly, this approach can be both accurate and objective, but also leaves room for identification of those pupils whom intelligence and performance tests usually miss (gifted underachievers, twice exceptional, gifted from disadvantaged backgrounds or ethnic minorities etc.) (Mandelman et al., 2010). However, as with the 'subjective' approaches it has been often argued that informants or selectors may not be effective in nominating gifted and talented pupils due to a lack of understanding of giftedness or an inability to evaluate evidence relating to pupils' personality characteristics and ability (Hartas et al., 2008). Also, according to Delisle's (2003) critique, researchers proposing this approach are simply favouring 'political expediency' to empirical evidence in order to escape the criticism raised against the inequalities heightened by selections with intelligence tests.. Nevertheless, the advantages of this process outweigh its disadvantages and as numerous researchers have argued, is currently the most effective approach to identification (Eyre, 2009; Heller, 2007, Renzulli & Reis, 2002).

Some of the most influential examples of this approach which include the characteristics described above are the following: Heller and Perleth's (2008) 'Munich High Ability Test Battery' (MHBT), Sternberg's (2005) Wisdom, Intelligence, Creativity Synthesized (WICS) Model, Gagne's (2005) Differentiated Model of Giftedness and Talent (DMGT Model), Ziegler and Stoeger's (2003) Explore Narrow Test Evaluate Review model (ENTER) for the identification of gifted pupils (Mönks & Katzko, 2005) or Renzulli's (1990) Revolving Door Identification Model (RDIM) (Renzulli &Owen, 1983). However, despite being very influential, none of the models mentioned here have escaped criticism and it is thus important for educators to be aware of this before using them as tools to help them with the identification of gifted and talented pupils. Specifically, as Ziegler and Phillipson (2012) claimed, these models use the 'parlance of inclusive education' but focus on the perceived 'deficits' of mainstream education (p.6). Hence, such models' ulterior purpose is to provide

gifted pupils opportunities to overcome these deficits. Moreover on this premise, it is considered essential to identify gifted pupils as early as possible, before introducing any support measures (Ziegler & Phillipson, 2012). What these authors argue is that approaches which focus on one or a few variables are too 'mechanistic' and are constrained by their commitment to 'select and place' (p.24). Instead they propose a systemic conceptualisation of giftedness, which forefronts the creation of 'highly individualized opportunities, allowing individuals to develop their action repertoire through interaction with specific, individually tailored learning environments' (Ziegler & Phillipson, 2012). As Chessor (2012) remarked, the exciting part about this model is that it is fluid and that 'adaptation is an important aspect of the learning process' (p.36). Finally, as Sutherland (2012) observed, this systemic approach to giftedness challenges many of the long held assumptions within the field of (gifted) education, although Ziegler and Phillipson do not elaborate on how 'the issues raised articulate with wider discussions within general education' (p.109).

Another framework which questions the importance of identification and highlights the importance of appropriate pedagogies, is the Talent Development Framework (Subotnik et al., 2011) which will be further discussed in Chapter 2.1.

As a result of the confusion around the definition of giftedness and the subsequent debate about the most effective way(s) to identify gifted and talented pupils described above, research on school practice has reported huge diversity in the methods used to identify gifted and talented pupils. Even when the criteria used are similar, the sequence of the process may differ (Carman, 2013). Surprisingly, research evaluating identification processes employed by tutors in the NAGTY summer school in England reported that there was considerable lack of accuracy and consistency in assessing pupils (Hartas et al., 2008). Similarly, researchers attempting to identify patterns of provision for gifted pupils in large scale projects have faced considerable difficulties obtaining clear information about the schools' identification policies. Schools are either unwilling to disclose this information or unsure about the process themselves. It is thus even harder for researchers to compare gifted education practice

between schools, when the object under comparison is not the same in each case (Carman, 2013).

Consequently, teachers should strive to develop an identification process underpinned by a cohesive theoretical framework (such as the models summarised above). In addition to the considerations teachers should take into account when developing their identification processes described at the beginning of this chapter, teachers should also reflect on the following suggestions. Firstly, their goal should be to include and serve the largest number of pupils possible, 'given both [possible] errors of measurement and our inability to predict who will continue to qualify for the designation gifted' (Worrell & Erwin, 2011, p.323). Identification should therefore be carried out in a series of steps, and be an ongoing process, taking into account children's interests, personality and developmental stages. Finally, teachers should focus on identifying those aspects of giftedness that the staff can both identify reliably and enhance. Thus, the development of specific talents, such as music, drawing or drama might be omitted. This deliberate omission is justifiable since as Worrell (2003) argued, 'even our most competent regular education teachers are not prepared to teach music, drama, dance or painting and leadership to individuals who are gifted in those areas' (in Worrell & Erwin, 2011, p.324). They should instead focus on the areas they can best promote. Finally, it should be noted again, that one of the most important factors that should inform teachers' decisions is the pedagogical programmes to follow this identification process.

1.3.1 Teacher's role in identification and provision

Very relevant to the discussion about identification of gifted and talented pupils and provision for their needs in the mainstream classroom is teacher's role. In the following paragraphs I will present and evaluate research evidence examining teachers' effectiveness in identifying their gifted and talented pupils and catering for them and the importance of appropriate training or staff development to better inform teachers about issues pertaining the education of gifted and talented learners.

Teachers' competence in accurately identifying their gifted and talented pupils has been frequently questioned and relevant international research is still contradictory (Freeman, 1998; Hany, 1997; Persson, 1998; Schack & Starko, 1990). It has been

argued for example that teachers rely on stereotypes when deciding whether a pupil is gifted and talented (Persson, 1998) and that discrepancies in the ways they define giftedness may result in a 'mismatch of identification procedures' amongst professionals (Freeman, 1996, p.5). As Hany (1997) argued 'the more professional experience teachers have, the more detailed is their concept of giftedness (Copenhaver & McIntyre, 1992; Schack & Starko, 1990). When teachers decide that a student is gifted or not, it is not wrong to assume that they refer to the traits that constitute their concept of giftedness' (p.160).

Several studies have indicated that teachers are in fact able to identify specific cognitive characteristics of the gifted and talented pupil, such as perceptiveness, the ability to apply knowledge and transfer it to different contexts, analytical and deductive reasoning, good memorising skills or verbal proficiency, as well as particular personality characteristics, such as motivation and achievement orientation, adaptability and independency working on assignments (Persson, 1998). On the other hand, some studies have shown that primary school teachers tend to over-identify children from middle-class backgrounds, or that they pay too much attention to social attributes thus looking for a child 'leader', an 'assistant teacher' and a 'role model' pupil (ibid.). For example, Betts and Neihart's (1998) study indicated that 90% of pupils identified as gifted by untrained teachers were simply 'high achieving conformists (Hewston et al., 2005). Moreover, a study investigating the identification procedure followed by mentors chosen to teach at the first Summer School of NAGTY (National Association for Gifted and Talented Youth) found that even these well-informed selectors made inaccurate and inconsistent decisions in handling evidence for the selection of gifted and talented youth (Hartas et al., 2008). As the researchers concluded, 'the lack of accuracy and consistency in handling evidence, the limited validity of assessment procedures, the lack of clarity with regard to what giftedness entails and what counts as evidence of giftedness, and the diverse views of giftedness all made the selection and identification process problematic.' (Hartas et al., 2008, p.16).

Apart from the debate as to whether teachers are able to and should take a principal role in identifying gifted and talented learners, very important is the debate

about teachers' effectiveness and commitment to provide for their needs. A lack of clarity about who is gifted is obviously closely related to a consequent uncertainty as to the ways a gifted pupil's needs should be met. In fact, even teachers who recognised the different learning characteristics of a gifted pupil compared to other pupils, reported that they do not need particular provision and that teachers should make sure that the needs of 'all' pupils instead of the 'one' should be paid attention to (Persson, 1998). Thus, even those who correctly identify gifted and talented pupils, if not well-trained and eager to meet their needs, may prove inefficient in promoting their education. Such a calamity is probably more likely to occur in settings where a clear school or national policy is not developed in order to guide teachers' practice. Indeed several studies have indicated that when teachers are more experienced, trained or are guided by explicit policies can effectively provide for their gifted and talented learners (Kuo, Maker, Su & Hu, 2010). Indeed, international research shows that provided they are properly informed and aware of pupils' learning experiences and perspectives, teachers can challenge their pupils in mainstream classes, by implementing practices that will be more extensively discussed in the following chapter, e.g. differentiation, enrichment, acceleration etc. (Prior, 2011).

In view of the above discussed arguments, teacher training and staff development in gifted education is critical in supplying teachers with the necessary background skills to better identify gifted and talented pupils and provide them with suitable learning opportunities. What is more, it has been suggested by relevant research that when teachers are offered explicit guidance to develop their understanding of the concept of giftedness, their effectiveness in catering for these pupils is greatly increased (Hanny, 1997; Hewston et al., 2005). The Education and Employment Committee Report (1999) on highly able children emphasised the significance of teachers being adequately trained in order to identify gifted pupils and reported that despite the fact that schools showed an increasing interest towards identifying and providing for gifted pupils, they were uncertain as how best to do it. It was also reported that teacher training and in-service staff development courses provided little information to teachers about the ways to meet gifted pupils' needs (in Hewston et al., 2005). A revealing example of how limited knowledge about giftedness

may hinder provision for these pupils is the following statement by a head teacher after reading the DfES's (2008) statement on gifted and talented education:

> *'I read the government statement [...] with a sad heart and determination that opportunities in my school will be open and encouraging for all learners. Can we identify and label children [...] who are just beginning to explore the world around them and themselves, as gifted and talented? Should we then, as teachers, educators of future generations, enable and offer opportunities in a narrow spectrum for these few children? Do we believe that all children are a gift from God in themselves, all with differing gifts and talents, that as educators it is our responsibility to help them to discover and explore? Can I identify 10% of children in my school and label them at this point in time as gifted and talented? What then do I label the other children as?' (Mounter, 2012, p.228)*

All the above raised arguments could have been responded to had there been more opportunities for teachers to discuss their fears and become better acquainted with this topic in relevant courses. Otherwise, it is obvious from the above strong statement that concerned or prejudiced educators will resist any policies which do not conform to their values. Since both in England and Scotland, teachers are the main actors in identification and provision for gifted and talented pupils' needs (Ofsted, 2001; Sutherland, 2003), it is important that 'a deeper understanding of the issues surrounding identification and their subsequent impact on learning and teaching' should be established in order to safeguard gifted and talented pupils' rights (Sutherland, 2003, p.216).

To conclude, in this chapter I focused on the discussion about the various conceptualisations of giftedness and the relevant debate about terminology and identification of gifted and talented pupils, concentrating on research evaluating teachers' role in the identification and provision for these pupils. The focus of the following chapter is the various forms gifted and talented education provision can take.

Chapter 2 **Provision**

Current research indicates that a substantial amount of gifted children around the world fail to be catered for at school, especially primary, and as a result many of them underachieve or even drop out from school early (Reis & Renzulli, 2010). Several studies have blamed a general lack of challenge and differentiation as the main reasons why gifted children underachieve. For example, a study conducted by Reis and her colleagues (2004) found that the great majority of classrooms observed, pupils did not receive differentiated curriculum or instructional strategies. In fact only in three out of the twelve classrooms observed, occasional differentiation took place. In the other 9 classrooms no differentiation was ever observed throughout the 9 month-period study (Reis et al., 2004). Numerous suggestions have been made to tackle the issue of lack of effective provision to meet gifted and talented pupils' needs. Eyre (2009) argued that the most traditional approach to provision is the 'identification-led' or as other authors have described it, the 'specialist approach' (Hewston, Campbell, Eyre, Muijs, Neelands & Robinson, 2005), wherein a limited number of pupils are identified as gifted and selected for high-level educational opportunities in selective settings, outside mainstream education. Advocates of this approach criticise mainstream classrooms as being inflexible and (intentionally) neglecting gifted pupils and mainly argue that only within a homogenous classroom is it possible to establish a complex and advanced learning environment to meet gifted pupils' needs (Eyre, 2009; Hewston Et al., 2005). These theories will be examined in greater depth in the following chapter. It should however be noted that a major flaw associated with this approach is its over-reliance on identification, which viewed in conjunction with what was discussed in the previous chapter about the ambiguous nature of identification can be quite unreliable and unjust, by for example consistently excluding ethnic minorities or otherwise disadvantaged children (Freeman, 2003).

At the opposite extreme lies the 'provision-focused' or 'inclusive' approach to gifted and talented education. Central to this is the principle that gifted and talented pupils should be provided for in the regular classroom with differentiated teaching techniques and challenging opportunities. According to Stainback and Stainback

(1990), inclusive school is the one which: "educates all students in the mainstream … providing [them with] appropriate educational programs that are challenging yet geared to their capabilities and needs as well as any support and assistance they and/or their teachers need to be successful in the mainstream" (in Hewston et al., p. 25). This definition underlines the importance of both pupil and teacher support. What is more, as Hewston and her colleagues emphasised, an inclusive system of education requires the implementation of a 'multilevel, multi-modal curriculum that can meet the needs of a heterogeneous classroom' (Hewston et al., 2005, p.25). As evidence produced in the conference of the World Council for Gifted and Talented Children in 2005 shows, there is a growing interest worldwide towards this approach (Eyre, 2009, p.1050). These approaches to provision are usually founded on the belief that giftedness develops with time and practice (Freeman, 2001; Renzulli, 1999; Smith, 2005; Steiner & Carr, 2003). As Freeman (2001) pointed out, 'children's intellectual development is not a smooth continuous process' and how well they develop 'whatever they were born with depends greatly on the environment they live in' (p.5). In fact, according to Siegler (1996) 'rather than proceeding in a lockstep fashion, cognitive development is thought to involve "a gradual ebbing and flowing of the frequencies of alternative ways of thinking, with new approaches being added and old ones being eliminated" (as cited in Steiner & Carr, 2003, p.236). Therefore teachers who believe that intelligence is not fixed, but changeable, realise that the environment plays a very important role in determining how intelligent or gifted an individual can become and thus apprehend the importance of offering them appropriate opportunities (Smith, 2005).

The focus of the following paragraphs will be the analysis of some of the major 'inclusive' approaches and the discussion of their strengths and weaknesses. I will first outline the most prominent acceleration strategies which aim to match the learner with the optimal curriculum level. Secondly, I will refer to the main curriculum adaptation strategies, which based on various differentiation methods, modify the curricula accordingly (Van Tassel-Baska, 2008). Subsequently, I will describe a number of specific instructional techniques (e.g. problem-based, inquiry, critical thinking learning) which can be employed in mainstream schools without extraordinary effort from teachers and stand out in the relevant literature as very effective in enhancing the

learning of gifted and talented pupils but also of the average and lower achieving pupils when applied to a broader population (Reis & Renzulli, 2010). Finally, I will evaluate two of the most prominent models for the provision of gifted and talented.

Acceleration is one of the principal but also most controversial educational interventions aiming to meet the needs of the gifted and talented. Its central principle is that it allows pupils to progress through an educational programme faster or at a younger age than normal (Colangelo, Assouline & Gross, 2004). There are several forms of acceleration, but their common feature is that they aim to offer pupils the appropriate level of challenge, reducing, when necessary, the time pupils need to complete schooling (ibid.). Concerns about the possible negative outcomes of acceleration have been raised by researchers, teachers and parents. Their concerns have focused on the possible socioemotional effects on accelerated children's development (Neihart, 2007). However, several meta-analytic studies have showed that able children participating in accelerative programmes of instruction almost always thrive (Kulik, 2004). In fact, in their editorial note of a volume devoted exclusively to acceleration, Colangelo and his colleagues (2004) argued that:

> *'Acceleration does not mean pushing a child. It does not mean forcing a child to learn advanced material or socialize with older children before he or she is ready. Indeed, it is the exact opposite. Acceleration is about appropriate educational planning. It is about matching the level and complexity of the curriculum with the readiness and motivation of the child […]. Acceleration is about respecting individual differences and the fact that some of these differences merit educational flexibility.' (Colangelo et al., 2004, p.1)*

Southern and Jones (2004) based on the definition of acceleration given above, identified eighteen types of acceleration:

> *'1. Early Admission to Kindergarten*
>
> *2. Early Admission to First Grade*
>
> *3. Grade-Skipping*
>
> *4. Continuous Progress*
>
> *5. Self-Paced Instruction*
>
> *6. Subject-Matter Acceleration/Partial Acceleration*

7. Combined Classes

8. Curriculum Compacting

9. Telescoping Curriculum

10. Mentoring

11. Extracurricular Programs

12. Correspondence Courses

13. Early Graduation

14. Concurrent/Dual Enrollment

15. Advanced Placement

16. Credit by Examination

17. Acceleration in College

18. Early Entrance into Middle School, High School, or College'

(Southern & Jones, 2004, p.6)

A description of each of these types of acceleration will not be given here. A useful distinction, however, will be drawn in order to summarise their main characteristics. Acceleration options, according to Rogers (2004), can be synopsised into two broad categories: 'grade-based' and 'subject-based'. In the former category fall all the options which shorten the time a gifted learner spends in school before accessing higher education; for example 'Early Admission to Kindergarten/Primary School/ High School/College', 'Grade Skipping', 'Early Graduation' or 'Grade Telescoping' (whereby a (group of) student(s) progress through the curriculum of several grades more rapidly, graduating thus two or three years earlier than customary) (Rogers, 2004). In the latter category belong the options which enable gifted pupils to access advanced content in specific curricula or areas of interest at a younger than typical age. Such acceleration options can be: 'Correspondence' or 'Distance Learning Courses', 'Advanced Placement Courses', 'Mentorship', 'Combined Classes' and 'College Course Enrolment (while studying in high school) (Hewston et al., 2005; Rogers, 2004).

Numerous reviews of literature on acceleration practices (see for example Van Tassel-Baska, 1992) have consistently produced evidence which supports its use and even shows that it is more effective than any other practice for the gifted learners (Hewston et al., 2005; Rogers, 2004). What is more, there is considerable empirical evidence that when accelerative strategies are tailored to the needs and interests of twice-exceptional pupils, they benefit too. Provided that a supportive and caring learning environment, which accommodates for any disabilities and teaches them how to be resilient, is ensured, a challenging accelerative strategy can by all means promote their needs (Moon & Reis, 2004). Furthermore, as Robinson (2004) emphatically argues, the fear that acceleration is dangerous for gifted children's socio-emotional development as a group, is groundless. Nevertheless, some subgroups of the gifted population may be more vulnerable to any negative consequences of acceleration compared to others: for example pupils with attention deficit, poor fine motor skills or those coming from unsupportive families (Robinson, 2004). When however, pupils' abilities, learning strengths, interests and family circumstances are carefully assessed before decision making, the school will be able to identify the form(s) of acceleration which will be more responsive to their social and learning needs (Rogers, 2004). Nevertheless, accelerative practices, especially grade-based ones are not very popular in the United Kingdom. Usually, any acceleration options given to gifted and talented pupils are limited in allowing pupils to take a greater number of exams or occasionally enabling pupils to attend a higher grade course in an area of specific interest/talent (Hewston et al., 2005). Instead of focusing on quality, this approach to acceleration, according to Jones (1983), focuses on quantity (in Hewston et al., 2005). Therefore, taking into account research findings which repeatedly report impressive outcomes of acceleration, as Rogers (2004) stated, 'the question for educators seems to be not *whether* to accelerate a gifted learner, but rather *how'* (p. 56).

Differentiation is one of the principal and most widespread curriculum adaptation strategies. It is the most straightforward educational response to the acknowledgement of the fact that gifted learners have different needs from the norm, offering advanced curricula with a strong emphasis on problem solving and higher level thinking skills (Van Tassel-Baska, 2008). It could be defined as the process by

which the school curriculum becomes accessible and is adapted to each individual's needs. Teaching methods and materials, methods of assessment and curriculum objectives are planned accordingly too (Hewston et al., 2005). As Marquez and Sawyer (1994) declared:

> *'Differentiated curricula designed to enhance the learning potential of the gifted and talented student should encourage the student to pursue topics in depth at a pace commensurate to student ability and interest, explore unforeseen tangents without the confinement of curriculum parameters, and initiate activities which diverge from the structured format within a framework of guidance and resource appropriate for such exploration.' (p.16)*

Empirical research has shown that differentiation strategies are highly effective in meeting the needs of gifted learners. Weston (1992) in a review of relevant research identified ten components which render differentiation effective:

> *'it is premised upon diversity,*
>
> *it is multidimensional,*
>
> *it applies to individuals,*
>
> *it applies to all learners,*
>
> *it is diagnostic,*
>
> *it challenges the expectations and preconceived notions of individuals,*
>
> *it challenges classroom relationships and offers more varied social patterns,*
>
> *it is integral to effective teaching,*
>
> *it is relevant to all teachers,*
>
> *it requires a long term whole school strategy.'*
>
> *(In Montgomery, 1996, p.26)*

There are two main types of differentiation most commonly observed in mainstream schools, namely, differentiation by 'inputs' and 'outputs' (Montgomery, 1996). In fact, according to Hewston, national policies in the United Kingdom draw a

similar distinction between differentiation by tasks and by outcomes (Hewston et al., 2005). In the first type (differentiation by inputs), teachers set different tasks with varying levels of difficulty suitable to different groups of pupils, usually based on their (perceived) abilities. Typically, teachers shape their instruction around a common context in which the whole class can participate and then set pupils different tasks – simple practice or application for the lower ability groups and more challenging, extension work for the higher ability groups. As Montgomery (1996) argues, the most serious weakness of this strategy is that pupils may soon realise what the teacher's expectations of them are (low or high) and conform to them, ruining at the same time their motivation to work harder. Nevertheless, this argument assumes that pupils will be grouped by ability within the class and will always be treated in a similar way, as belonging to one or other ability group. A more extensive discussion about (ability) groupings will take place in the following chapter. Another serious concern, which should be kept in mind when implementing this strategy is that it relies on teachers' perceptions of their pupils' abilities, and it is therefore possible that some pupils may be misidentified (e.g. twice-exceptional) (Montgomery, 1996).

In differentiation by outputs, teachers assign a common task to their class but have different expectations of them, which they (should) clarify by setting distinct assessment criteria (ibid.). For example, teachers may either set a common task, which however few pupils will be able to excel to as it will progressively become harder, or they will give their class an assignment, such as an essay, with a common topic for everyone, but will set different marking criteria for pupils, according to their levels of achievement. The main drawback of the first option is that only the most able pupils in class will have a sense of achievement in fulfilling the task assigned. Additionally, assigning the same task to gifted pupils as the rest of the class may prove pointless if teachers do not pitch high. That is, if tasks are not challenging enough for gifted pupils, they will probably not be very motivated to complete it and may under-function (Montgomery, 1996). Despite these arguments, the two main methods of differentiation (by inputs and outcomes), are undeniably much more effective strategies in promoting the needs of all learners, including the gifted and talented, than

the common alternative of teaching to the middle, especially when teachers are aware of the (possible) disadvantages reported here and try to overcome them.

Montgomery (1996) proposed a third type of differentiation, the 'developmental differentiation', as she labelled it. Her definition of it is as follows:

> *'Developmental differentiation (DD) involves curriculum activities which will reveal each individual's abilities and needs. This then enables the design or modification of the next stage of activities to meet those needs and give a better match between abilities and needs of individuals with the overall curriculum objectives. These aims and objectives are best met when cognitive process pedagogies are used which promote and develop higher order thinking abilities. During the learning process the teacher can further modify the task or promote intellectual challenge and motivation by positive cognitive intervention (PCI). In this interaction it is possible to obtain direct observational feedback on each child's performance in order to build up a profile of development and aid curriculum modification and development.' (Montgomery, 1996, p.29)*

It is obvious from the above that teachers employing this method should acknowledge and take into account individual differences, employ cognitive process instruction methods, use positive cognitive intervention (PCI) and assess pupils both for formative and diagnostic reasons. This type of differentiation appears to take into account all the important aspects of pupils' development and learning and can thus prove valuable to teachers who aspire to provide for all individual children's needs. However, it has been frequently reported that teachers need to enhance their competences especially in terms of 'upward differentiation' to cater for gifted and talented pupils as their differentiating efforts usually concentrate on the lower ability pupils (Rasmussen & Lingard, 2018).

Another principal curriculum adaptation method is 'Curriculum Compacting' or 'Enrichment'. Some authors draw a sharp distinction between these two terms (e.g. Hewston et al., 2005), but others define enrichment as a key element of 'curriculum compacting' or even 'differentiation' or use the terms interchangeably (e.g. Freeman,

2011; Gagné, 2004; Reis & Renzulli, 2010; Southern & Jones, 2004). Here a more fluid view of 'Curriculum Compacting' will be adopted- i.e. that instruction time is reduced, especially by limiting introductory activities, drill, revision and practice and is replaced by participation in enrichment activities or advanced content learning (Southern & Jones, 2004). Constant assessment is core to this method, in order to determine which skills have already been mastered and where pupils need more depth. Enrichment activities in that sense are the opportunities offered to pupils within the classroom in order to increase the breadth and depth of their experiences, improve the quality of their learning and increase their choices. Such activities may be independent (research) projects, field trips, discussions/courses with experts in a field (e.g. writers or scientists) and cultural experiences (Hewston et al., 2005). Freeman (1991) has suggested the use of 'out-of-school' enrichment programmes, such as (thematic) summer camps or specialised after-school classes. These programmes not only enrich pupils' curricular diet but also enable gifted pupils to interact with 'like-minded' individuals. In such learning environments, Freeman's longitudinal studies indicated that apart from any academic benefits, enrichment also facilitates gifted pupils' improvement in interpersonal relationships. On the other hand, several concerns about this method have been raised. First of all, it has been indicated by relevant research that participation in specialised classes or out-of-school programmes may result in the segregation of gifted pupils from the rest of the class and their social isolation (Hewston et al., 2005). It has therefore been counter suggested that enrichment activities should mainly be provided within the classroom (Eyre & Geake, 2002). Additionally, it has been argued that some enrichment activities may rely on available funding and the accessibility of enrichment resources in the area of the school (Hewston et al., 2005). Nevertheless, as Freeman (1997) reasoned, curriculum compacting and educational enrichment should not be viewed as supplementary processes to the normal curriculum which depend on 'extra' funding and free time, but rather as 'the deliberate rounding out of the basic curriculum subjects with ideas and knowledge that enable a pupil to be aware of the wider context' (p.57). As she further stated:

> *'Enrichment can take place in the school classroom by using extension learning materials, in the school or public library, in the community, or even through a correspondence course […]. Enrichment support systems in the community will obviously vary; there may be local associations, or clubs and societies which run activities and would welcome school groups, such as those for talented children or young mathematicians. There may be museum and library courses, such as art or poetry sessions for children at weekends. Competitions run by private groups such as newspaper poetry competitions, or international ones such as the Olympics of the Mind, are open to all children as competitors. […] It is not usually the lack of money which prevents [enrichment]; what is needed is a real concern and a willingness to alter routine – to think differently.'*

The overall profits gained by this approach have been summarised by Reis and her colleagues' (Reis, Westberg, Kulikowich, Callard, Hébert, Plucker, Purcell, Rogers, & Smist, 1993) comprehensive study of curriculum compacting. The authors found that an amount between 40 and 50% of traditional classroom material could be eliminated for targeted students in literacy, numeracy, science, and social studies. Most of the eliminated material was replaced with enrichment activities and it was determined that not only identified gifted pupils but also other bright pupils profited from compacting. Finally, teachers' main worry that a substantial elimination of the curriculum would result in pupils achieving lower scores in (national) tests was disputed as there was evidence suggesting that even when 50% of the curriculum was eliminated, gifted pupils did not achieve lower than the control groups (Reis et al., 1993).

Apart from the above discussed methods (acceleration, differentiation, curriculum compacting) there are various instructional techniques which can have a very positive impact on gifted and talented pupils' education. Here, I will refer briefly to some of them. One of the most powerful instructional tools for the gifted is the use of inquiry in order to engage pupils in higher order thinking and develop their critical thinking skills. As Smith (2005) summarised, questions asked in class should be stimulating, should not require restricted responses and should instead encourage engagement with the problem through deep thinking. Teachers using well-tailored questions can determine pupils' perspectives and challenge their stereotypic views and

biases. What is more, when engaging in a debate/essay or problem solving task, teachers should encourage pupils to ensure they are aware of the purpose of the task and the question at issue, to examine as many perspectives as possible, to use evidence to form their judgements, to draw relevant conclusions and foresee the outcomes of these conclusions (Van Tassel-Baska, 2008). In addition, very relevant to this is Bloom's (1956) taxonomy of higher order thinking skills: teachers should not engage pupils only in lower and middle order skills, such as remembering facts or comprehending simple ideas and transferring knowledge to a similar situation, but in higher order too, such as distinguishing facts from opinions, judging, hypothesising and showing originality of thought by inventing and composing (Eyre, Coates, Fizpatrick, Higgins, McClure, Wilson & Chamberlin, 2002). Furthermore, of paramount importance is nurturing a learning environment of high expectations, where pupils are constantly challenged and their willingness to participate in stimulating activities rather than their ability to carry them through without mistakes is appraised. That way a secure environment where pupils do not shy away from risks for fear of failing is developed. Such an environment has very positive effects on (gifted) pupils (Eyre et al., 2002). To that end, help to reflect and reach a sound conclusion should be offered to pupils with probing open ended questions. Moreover, in science lessons, (gifted) pupils should be asked to make predictions about the possible outcomes of an experiment and use arguments and evidence to justify their opinions. Finally, this list of effective instructional techniques could be extended ad infinitum, but what should be noted again is that in order for teachers to determine what the most suitable way to teach their gifted and talented pupils is, they should always take into account both the individual children's strengths, weaknesses and personal interests (ibid.).

Before bringing this chapter to a conclusion, I will describe two influential models of provision for the gifted and talented, as was warranted at the introduction. The first is Renzulli and Reis's (1985) 'Enrichment Triad Model' (Figure 5), and specifically, its improved version the 'Schoolwide Enrichment Model' (SEM) (Figure 6) which was first implemented more than twenty years ago and is still very popular (Eyre, 2003; Renzulli & Reis, 2002). This model was developed, then field tested in several schools and then modified again to take its modern form (Van Tassel-Baska &

Brown, 2007). The process of identification which this model proposes has already been described in the previous chapter. Once identification has taken place, selected pupils are offered a number of services: first, interests and learning styles are used to develop the 'Total Talent Portfolios', second, curricula are modified (using curriculum compacting strategies) according to eligible pupils' needs and substituted with different work, third, Type I, II and III of enrichment experiences are offered (see Figure 5) (Van Tassel-Baska & Brown, 2007). Type I, or as labelled, 'general exploratory activities' exposes pupils to a variety of experiences and disciplines not typically covered in the regular school (using field trips, guest speakers, demonstrations etc.) (Polyzoi, Klassen, Babb, Gialamas & Perakis Evloyias, 2011; Renzulli & Reis, 2002; Van Tassel-Bask & Brown, 2007). Type II, i.e. 'group training activities', aims to develop critical and creative thinking skills, meta-cognitive abilities, methodological processes and communicational skills through a number of specifically designed materials in group instruction (ibid.). Finally, Type III, i.e. 'individual and small group investigations of real problems', is suitable for the most advanced learners. Pupils adopt the role of a practicing professional and work on self-selected activities striving to develop and authentic product (Polyzoi et al., 2011, Van Tassel-Baska & Brown, 2007). Since its development, the SEM has been extensively researched with overall very positive effects reported and it has been widely implemented in schools in the US mainly (Van Tassel-Baska & Brown, 2007).

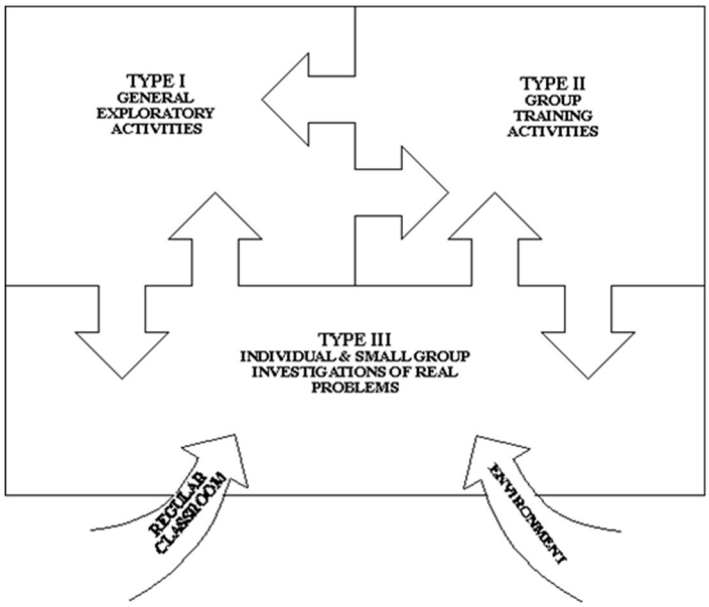

Figure 4: The enrichment triad model (Renzulli & Reis, 2002).

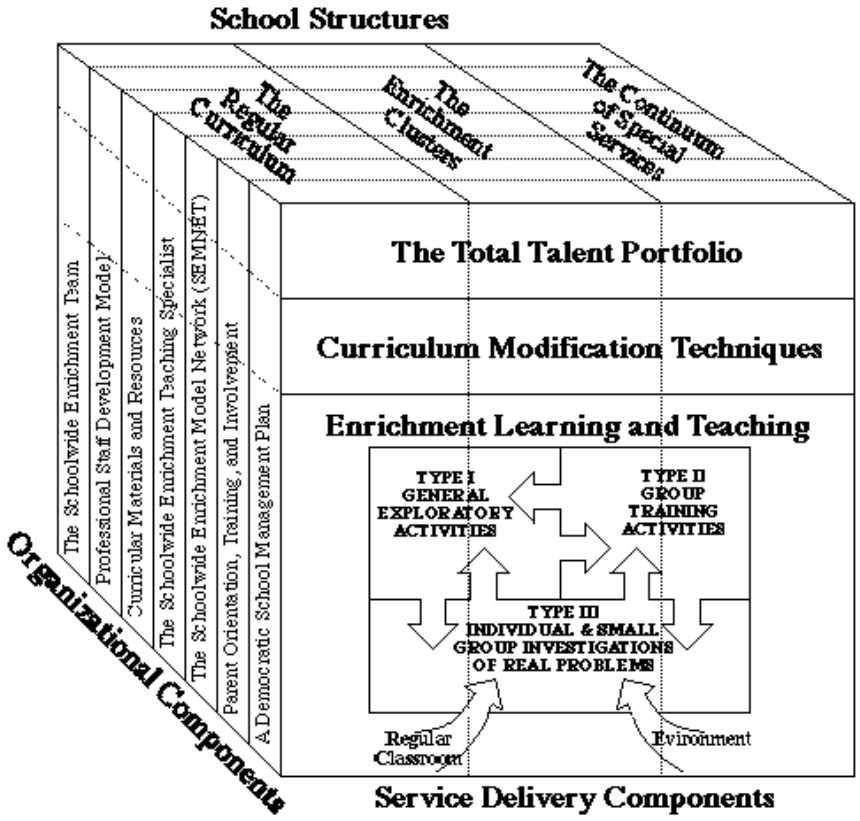

Figure 5: School Structures. The schoolwide enrichment model (Renzulli & Reis, 2002).

A second, widely acknowledged model for the provision of gifted and talented pupils is Van Tassel-Baska's (1986) Integrated Curriculum Model (ICM). This is also a model the development of which has hugely relied on research. It has three dimensions: '(a) advanced content, (b) high-level process and product work, and (c) intra and interdisciplinary concept development and understanding' (Van Tassel-Baska & Brown, 2007, p.350). The first dimension based on a 'diagnostic-prescriptive instructional approach' aims to develop challenging curricula, mainly through acceleration and curriculum compacting (Van Tassel-Baska & Wood, 2010). The second dimension aims to promote pupils' opportunities to manipulate and utilise complicated information as well as boost their critical thinking skills and cognitive processes through stimulating discussion and project work (Van Tassel-Baska & Brown, 2007; Van Tassel-Baska & Wood, 2010). Last, the third dimension focuses on organising pupils' learning experiences around themes and ideas in an attempt to enable them to appreciate 'systems of knowledge rather than the individual elements of these systems' (Van Tassel-Baska & Wood, 2010, p.349). As Van Tassel-Baska and Wood (2010) underline, 'themes and ideas are selected based on careful research of the primary area of study to determine the most worthy and important ideas for curriculum development, a theme consistent with reform curriculum specifications in key areas […]. The goal of such an approach is to ensure deep understanding of disciplines, rather than misconceptions' (p.346). The effectiveness of this model has been widely investigated in schools and districts implementing it. Its major contribution lies in the fact that it not only shapes the nature and extent of learning for the gifted and talented learners but it also works as a motivator stimulating a broader group of learners and increasing their achievement (Van Tassel-Baska & Wood, 2010).

2.1 Theoretical Framework

Before bringing this chapter to an end, I will discuss in detail here the theoretical models relating to the conceptualisation of giftedness, identification and provision which have helped formulate my research questions and influenced my methodological choices.

As I pointed out in Chapter 1.1, conceptions of giftedness originating from developmental psychology have become more popular over the last decade. Those theories' main argument is that giftedness 'is not a fully formed trait' (Makel et al., 2015, p.203). Specifically, as Feldhusen (2005) declared, 'Gifts come from people. Nature gives no gifts, but it does transmit some genetic potentials […]. Genetic potentials unfold in interaction with stimulating experiences structured by parents, family, home, schools, teachers, and curricula.' (p.64). Therefore, as Mönks and Katzko (2005) stated, these environmental conditions can either facilitate or hinder the development of a person's potential. In this thesis a conception of giftedness which shares these principles is adopted, drawing from relevant research in human development, motivation and creativity. Thus in line with Subotnik and her colleague's (2011) definition, giftedness is viewed 'as a developmental process […] that is domain specific and malleable' (p.6). And as they further argue, although potential is a starting point for outstanding performance,

> *'giftedness must be developed and sustained by way of training and interventions in domain-specific skills […], the acquisition of the psychological and social skills needed to pursue difficult new paths […], and the individual's conscious decision to engage fully in a domain. […] The goal of this developmental process is to transform potential talent during youth into outstanding performance and innovation in adulthood'* (Subotnik et al., 2011, p.6).

This framework is particularly important because it purports to bridge the current disconnection between gifted performance in childhood and adult eminence (Olszewski-Kubilius, Subotnik & Worrell, 2018). As its instigators argue, the current systems of gifted identification and provision should be replaced by one that equips children and adults with talents in specific domains with the necessary resources to actualise their talents and become ground-breaking professionals, athletes, artists and scholars, 'should they so choose' (Subotnik et al., 2011, p.6). Their talent development framework incorporates seven components:

1. Abilities are domain-specific and malleable
2. Domains of talent have different trajectories (start, peak and end). For example gymnastics start early, peak in adolescence and end in early adulthood, while in some

> academic areas, exceptional precocity can take place in late adulthood.
>
> 3. Opportunities are essential for talent development (appropriate coaching, training and education is necessary for development of talents and young children need exposure to several domains and ample opportunities to experiment with them).
>
> 4. Opportunities must be taken (often pupils resist taking opportunities either for lack of interest or confidence).
>
> 5. Mental skills are important (e.g. resilience, effort, task commitment)
>
> 6. Importance of social skills (e.g. collegiality, being gracious in setbacks or success, being able to promote oneself)
>
> 7. Long-range thinking and planning for talent development (appropriate preparation for the next stages of the talent trajectory). (Subotnik et al., 2011)

Some of the main principles set out for Identification by the 'Talent Development Framework' are that 1) ability should be viewed as malleable and domain specific and hence varied identification tools should be employed which are also sensitive to both domain-specific abilities and to different levels of ability within these domains (Calvert, 2018), 2) identification should be a continuous and ongoing process, with a focus on unearthing both potential and demonstrated, advanced achievement (Calvert, 2018). According to its instigators, its main contribution lies in the fact that it emphasises the 'development of emergent talent and potential and therefore offers more opportunity and direction to address the needs of a wider range of gifted children, especially low-income and culturally and linguistically diverse gifted students' (Olszewski-Kubilius & Thomson, 2015, p.38). Specifically, selection procedures according to this Framework take into account students' previous opportunities to learn (ibid.). For example, any data used for identification should be used holistically 'to identify not only students who reach high cut-off scores on tests but also students who are making rapid progress or demonstrating upward trajectories in response to more challenging curriculum and instruction' (Olszewski-Kubilius & Thomson, 2015, p.56). Another contribution of this model is that it proposes reversing the 'typical' order of identification, whereupon gifted pupils are first identified and then opportunities are provided to them. Instead it suggests offering opportunities first,

especially in the early years, and assessing pupils later to determine how they respond to challenges (Olszewski-Kubilius & Clarenbach, 2012). As Olszewski-Kubilius and Thomson (2015) underlined, 'intense, challenging, content-rich preparatory programs can enable more students to develop their abilities to the point where they qualify for subsequent gifted programming' (p.57) which is particularly important for pupils with low SES, who lack appropriate opportunities and are often missed by other identification processes.

Finally, as the instigators of the Talent Development Framework's suggested, appropriate provision should be viewed as a mega-model of talent development that is,

> *'a model integrating the most compelling components of already-established models [such as the ones described above], intended to apply to all domains of endeavour. A comprehensive model of talent development should take into account when a domain can first be expressed meaningfully—whether in childhood, adolescence, or adulthood. The point of departure could be based on physical factors (e.g., muscle mass or puberty) in sport, music, or dance; depth of experience in areas such as diplomacy or public policy; or exposure to anthropology or sociology, as courses in these fields are not typically offered until college'* (Subotnik et al., 2011, p.29).

The main principles for provision inside mainstream schools in a Talent Development Framework, according to Krisel (2018), are that firstly any programmes must match the children's stage of talent development, i.e. they must initially focus on sparking interest in young children and drawing out potential, then develop competencies within specific domains and ultimately foster engagement and deep commitment as well as a 'domain-related, scholar identity' (Krisel, 2018). As Olszewski-Kubilius and Thomson (2015) further elaborated, schools need to develop

> *'opportunities for students at different stages of talent development who are the same age or grade. This includes enrichment programs for students whose talents are just emerging and whose motivation and interest are just developing while simultaneously having accelerative programs for students with well-developed ability and high motivation.' (p.57)*

Secondly, a system-wide approach is required to provide a range of services and programmes, fully integrated into the mainstream curriculum and the culture of the school (Krisel, 2018). Such a systemic approach can be more inclusive than other approaches as it tailors provision to individual pupils' needs taking into account their strengths, weaknesses, interests, personalities and home environments and is not necessarily restricted to gifted and talented pupils, but considers all children across the spectrum of abilities.

The effectiveness of the methods and models described above do not depend solely on teachers' willpower and teaching skills. When gifted pupils are allowed to take ownership of the education they participate in by being provided with meaningful choices, their motivation and self-efficacy increase and thus their academic performance (Douglas, 2004). Teachers' role of course is central in providing pupils with appropriate choices and encouraging them to become active partners in the planning and evaluation of their learning. This process can be described as 'self-advocacy' and its core elements according to Douglas (2004) are: an appreciation of ones' responsibilities and rights, the development of one's learning profile following an assessment of their abilities and interests, weaknesses and strengths, habits and learning styles, an awareness of available opportunities and an association with parent/teacher or even older peer advocates who are willing to facilitate their learning.

To conclude, it is obvious from the above discussion that gifted and talented learners need appropriate services and programmes to enable them to reach their potential. Such services can be acceleration, differentiation, curriculum compacting with enrichment activities and a generally challenging classroom environment which through various teaching techniques stimulates all learners (Renzulli & Reis, 2010). All these, however, need to be carefully tailored to the individual learner and integrated to the mainstream curricula, given the huge diversity of the gifted population (Freeman, 2011). The alternative of no or incidental and piecemeal provision is too dangerous as it may lead to boredom, underachievement, a general negative attitude towards learning and school drop-out (Renzulli & Reis, 2010). As Sternberg (1996) emphasised, we need to appreciate the value of gifted and talented pupils and treat them as our 'most valuable natural resource' (p.171). Having discussed various

education strategies for the provision of gifted and talented pupils in this chapter, I will proceed with an examination and critical discussion of the literature regarding various grouping arrangements and their possible implications for gifted education on the following chapter.

Chapter 3 **Grouping arrangements**

The purpose of this chapter is to discuss the strengths and weaknesses of various grouping arrangements and their implications for gifted and talented education as well as examine the use of these arrangements within the UK. As will be further explained later in my thesis, this issue was very prominent in my data, and thus I decided it merited careful analysis at this point.

There are many possible ways pupils can be grouped at school, each with different implications for their learning. Grouping arrangements differ in terms of size and composition, in the amount of teacher support they receive, the curricula taught, the type of instruction as well as the quality and degree of pupil interaction. Some groupings allow teachers to manage the classroom more effectively but may not necessarily enhance pupils' learning, while others may enhance learning, making however teaching more demanding (Baines, Blatchford & Kutnik, 2003). It is important though to always be aware of the fact that differences in the levels of student achievement and their self-esteem do not result only from the types of grouping used in class, but also, and most significantly from the types of teaching and learning that takes place and the tasks pupils are assigned to work at (Tieso, 2003).

There has been a long and heated debate regarding the adoption of different types of grouping in schools (Borland, et al., 2002). As Slavin (1990, p.473) summarized it:

> *'In essence, the argument in favour of ability grouping is that it will allow teachers to adapt instruction to the needs of a diverse student body and give them an opportunity to provide more difficult material to high achievers and more support to low achievers. The challenge and stimulation of other high achievers are believed to be beneficial to high achievers. Arguments opposed to ability grouping focus primarily on the perceived damage to low achievers, who receive a slower pace and lower quality of instruction, have teachers who are less experienced or able and who do not want to teach low-track classes, face low expectations for performance and have fewer positive behavioural models.'*

Those who support the use of grouping are primarily concerned about effectiveness, while those against it are primarily concerned about equity. Consequently, as Braddock and Slavin (1992) argue, 'the burden of proof in terms of effectiveness must be on those who would track [or group]'.

Among the most prevalent types of grouping arrangements is streaming (or 'tracking' as it is called in the US), setting, within-class ability grouping and mixed ability grouping (with or without differentiation of the curriculum). The main assumptions underpinning the use of ability grouping in schools is that it enables teachers to achieve homogeneity and thus meet each pupil's needs more effectively, that ability -not attainment or achievement- can be easily measured and predicted (Shukhnandan & Lee, 1998), and that homogeneous groupings are more effective in raising standards of attainment, principally in numeracy and literacy (McPake, Harlen, Powney & Davidson, 1999b). With streaming, pupils are permanently assigned to classes based on an assessment of their 'general ability' and/or prior performance and remain with their streamed class for most subjects (HMI, 1979; Matthews, Ritchotte & McBee, 2013) grouping. This is the most highly debated grouping arrangement as serious concerns have been repeatedly raised about its tendency to create and maintain inequalities as well as reduce the self-concept and self-efficacy of those pupils allocated to the 'lowest' steams (Boaler, William & Brown, 2000; Jackson, 1964; Oakes, 1985; Slavin, 1990). What is more, research on the effectiveness of streaming in raising pupils' levels of attainment reports mainly negative or neutral results (Slavin, 1990). As streaming is not a very common practice in primary schools (Neihart, 2007), the focus of the following paragraphs will be a discussion of the remaining three.

Setting is another form of grouping pupils which became more popular in the 1970s and 1980s in the UK and it seems that it is still quite widely used (Blatchford, Kutnik & Baines, 2003; Ofsted, 1998). In this case, pupils are allocated in mixed ability classes but are selected for one or more subjects (usually numeracy and literacy) based on their attainment in the subject in question (Ireson & Hallam, 1999). 'Setting can be imposed on a whole year group or on a particular band at a time' (HMI, 1979). The main argument used when setting is adopted is that heterogeneity is reduced, facilitating whole-class teaching and allowing teachers to match their instruction to

pupils' perceived academic ability (Boaler et al., 2000). It can also reduce the size of teaching groups by dividing classes into several sets (usually though three; the 'bottom', 'middle' and 'top' set). Moreover, it is not as segregating as streaming, since pupils are allocated in mixed ability classes for most subjects. However, as Shukhnandan and Lee (1998) argued, 'by implementing setting in one subject, setting can quickly reverberate throughout the curriculum, creating 'residual setting'. This means that pupils can find themselves being set in a range of subjects on the basis of their ability in one subject area or working in differently composed teaching groups for every subject' (p.22). In addition, as with streaming, there is extensive research evidence indicating that social class influences setting decisions, 'resulting in disproportionate numbers of working-class students being allocated to low sets' (Smith & Sutherland, 2005, p.70). Furthermore, research on the impact of this practice on pupils' attainment has been inconclusive; some evidence suggests that high achieving pupils benefit from setting while lower achievers fail (McPake et al., 1999b).

Within-class grouping is a less formal grouping arrangement implemented mainly in primary schools (Neihart, 2007); pupils are assigned to groups within their classroom based on their abilities, skills, interests or even their behaviour. These groupings can be either heterogeneous or homogeneous and are based on teachers' decisions (Matthews et al., 2103). While pupils are grouped within their class in small groups for one or more topics and instructed separately (Shukhnandan & Lee, 1998). Typically, teachers who use this arrangement introduce a lesson to the whole class and then place pupils into smaller groups based on their demonstrated performance (Renzulli, 1994; Tieso, 2003). Then, while the class engage in the activities assigned to them, teachers focus their attention to one of the subgroups (Kulik & Kulik, 1992). This is a method some teachers use to facilitate the differentiation of their instruction according to pupils' levels of academic ability and to tailor the curriculum to their needs. It is also, compared to setting (or streaming), more inclusive and escapes the dangers associated with (permanently) labelling pupils. However, it may be often used to 'simply reduce the number of pupils the teacher works with at any one time' (Shukhnandan & Lee, 1998, p.4) or to minimise disruption. According to Kulik and Kulik (1992), in order for this grouping practice to be successful, teachers 'must

present different material to each group. It would be inefficient for a teacher to divide a class into thirds on the basis of ability and then to make the same presentation separately to each of the three groups.' (p.75). What is more, as relevant research has indicated, this method is effective when used intensively with groups of three to four pupils, instead of what is often the case, i.e. groups that are determined by the size of rooms and classes instead of an educational rationale (Shukhnandan & Lee, 1998).

Finally, with mixed ability teaching, probably the most popular grouping arrangement especially in primary schools nowadays, pupils are taught in groups of a wide range of abilities (HMI, 1979). This arrangement is underpinned by the comprehensive belief that pupils should not/ cannot be grouped homogeneously and that their needs can only be addressed on an individual basis. The main argument used to support this method is that it provides equal opportunities to pupils in terms of instruction, curriculum and resources and that it escapes the disadvantages associated with homogeneous grouping (Ireson & Hallam, 1999). However, it is considerably more demanding in terms of planning for teachers to effectively implement individualised teaching (Shukhnandan & Lee, 1998). Furthermore, according to the HMI (1978), it appears to be a disparity between the underlying egalitarian philosophy of mixed ability teaching and its practice (Ireson & Hallam, 1999). Relevant research has indicated that where mixed-ability grouping is favoured, whole-class teaching predominates and pupils are rarely encouraged to collaborate. What is more, teachers expectations tend to be rather low and 'few group tasks make sufficient cognitive demands on the more able and in many cases do not even stretch average pupils.' (ibid. p.352). As with all grouping arrangements, evidence suggests that the success of mixed-ability teaching relies heavily on teachers' skills, specifically on their flexibility, on their teaching approaches and the degree to which they differentiate instruction and materials (ibid.)

The dilemma teachers face on how to achieve a strategic balance and make learning most effective is central to their role as pedagogues. Being a pedagogue entails the rather demanding duty of enhancing learning of all pupils and with particular learning, social and physical constraints (e.g. class size) to take into account (Baines et al., 2003). Consequently, arranging pupils in groups/sets/streams only for

teaching efficiency and/or to tackle physical constraints is inadequate, as pupils' social and learning needs should also be borne in mind. The grouping unit, as Baines et al. (2003) argued, 'must therefore be strategically constructed in relation to working arrangements and learning purposes'.

3.1 Implications for gifted and talented

Many advocates of gifted education argue in favour of the use of 'homogenous' ability groupings by teachers in order to meet gifted students' learning needs. They claim that selective ability groupings enable teachers to tailor their instruction to the gifted pupils' needs and therefore challenge them, something that seldom happens in mixed-ability settings, where most teachers tend to pitch their instruction to a perceived 'middle-ground' pupil. Revealing is Rogers' (2000) statement that: '[Gifted learners] must be in groups so that their school curriculum may be appropriately broadened and extended. The pacing of instruction, the depth of content, and advancement in knowledge fields, which these students must have, cannot be effectively facilitated without a variety of ability-grouped arrangements' (p.107). Moreover, they argue that working in homogeneous groups, gifted pupils have the opportunity to interact with 'intellectual' peers, engaging in stimulating discussions but also viewing their own abilities more pragmatically than they would do if they were always the most able pupil in their group (Fiedler, Lange & Winebrenner, 1993). More recently, a study evaluating the effects of school-wide cluster grouping on gifted and 'non-gifted' pupils in the US, reported positive effects on the achievement of all pupils in mathematics, but no significant differences on either group's achievements in reading (Matthews et al., 2013). Nevertheless it has been frequently counter-argued that students taught in the highest sets and especially gifted girls, can be disadvantaged as a result of a very competitive classroom environment, fast paced lessons and a constant pressure to succeed (Boaler et al., 2000; Smith & Sutherland, 2005).

Other researchers have argued that cooperative learning in mixed ability settings benefits gifted as well as 'non-gifted' students (Patrick, Bangel, Jeon & Townsend, 2005; Robinson 2003; Sapon-Shevin & Schniedewind, 1993). According to these researchers, constructive discussions among pupils in a collaborative format

can promote both gifted and less able pupils' conceptual understanding (Patrick et al., 2005). What is more, according to Neber and his colleagues, 'heterogeneity enables productive social conflicts, which initiate knowledge generating epistemic activities' (Neber, Finsterwald & Urban, 2001, p.200). Scepticism about the benefits of mixed-ability settings has focused on the following issues. First, on the question of whether it is possible for gifted pupils to be academically challenged when the entire group is assigned the same task, which often gifted pupils have already learned. Secondly, as some educators of gifted learners have claimed, in mixed groupings there is a heightened risk of teachers exploiting gifted pupils as peer-tutors who help their less able peers rather than ensuring that they too have equal opportunities to further their learning (ibid.). Thirdly, another argument against the use of mixed ability groupings is that teachers tend to pitch their teaching to the average pupil 'following the introduction of accountability systems built around proficiency counts', in order to ensure that most pupils will meet the baseline goals for the year and lose sight of the already proficient pupils (Neal & Schanzenbach, 2010).

Both the views described above (in favour of homogeneous or heterogeneous groupings) are based on the assumption that gifted and talented is a uniform group of pupils who share the same characteristics, learn all subject areas fast, achieve highly, have a broader and deeper understanding of subjects and generally are ahead of their non-gifted peers, they are highly motivated, they do not hold misconceptions and enjoy learning and being challenged (Patrick et al,. 2005). In fact, however, there is considerable discrepancy; gifted students may be very advanced in some subject areas but not in others, they may underachieve or even have learning disabilities (Adam-Bayers, Whitsell & Moon, 2004; Matsagouras, 2008; Patrick et al., 2005). It can therefore be argued that some learning structures have the potential to promote the learning of some gifted pupils and others may not.

This is one of the most important reasons why pupils' view about the ways they are grouped should be taken into account (Lewis, 2010). Despite the fact that legislation in England and Scotland (Children Act 1989 and 2004; The Children in Scotland Act, 1995; DfES, 2005) has underlined the importance of encouraging pupils to participate in their schools' decision-making processes, research evidence indicates

that pupils do not participate actively in these processes (Smith & Sutherland, 2005). Moreover, research on pupils' views of the organisational arrangements in their schools has revealed contrasting opinions. Some pupils working on top sets report being under constant pressure to achieve highly (Boaler, 1998; Graven, Marsh & Print, 2000; Smith & Sutherland, 2005), others report that they feel more comfortable and motivated, because they are challenged and their needs are taken into account. On the other hand, some gifted pupils working in mixed ability settings report being bored because the pace is too slow or the work too easy and feeling used because teachers often ask them to 'do their work', i.e. to tutor their less able peers (Robinson, 2003). Other gifted pupils however, have declared being sufficiently stimulated in their mixed ability groups. Furthermore, some researchers have argued that gifted and talented pupils either prefer to work alone or with 'true peers', that is with pupils of the same interests or abilities, while others have argued that they are happy to work cooperatively, provided they are in a supportive and motivating environment (French, Walker & Shore, 2011). Finally, it has been frequently reported that pupils in sets or ability groups have stated that they are not accurately identified and should have been allocated in different ability sets or groups (Yonezawa & Jones, 2006).

To conclude, it is obvious from the above discussion, that the debate on whether gifted pupils should be taught in homogeneous or heterogeneous settings is inconclusive (Renzulli, 1997). Researchers have neither resolved about the effectiveness of either of the methods for the promotion of the needs of gifted and talented pupils nor is it clear whether gifted pupils prefer one of these grouping arrangements. What is more, as Boaler (1997) argued, an important oversight upon which most homogeneous grouping decisions are based is that:

> *'students of a similar 'ability', assessed via some test of performance, will not necessarily work at the same pace, respond in the same way to pressure or have similar preferences for ways of working. Grouping students according to ability and then teaching towards an imaginary model student who works in a certain way at a certain pace, will almost certainly disadvantage students who deviate from the ideal model.' (p.593)*

It is therefore too simplistic to regard the effects of the various grouping arrangements as 'universally good or bad for all students' (ibid.). To tackle this issue some suggestions have been made. Slavin (1990) for example, suggested placing gifted pupils in mixed ability groups and increasing the use of cooperative learning, by effectively using differentiation and accelerating extremely able learners in limited subjects only (particularly numeracy). Teachers however need to make sure that the tasks in which pupils engage are stimulating and that all members of the group contribute to the group activities. Moreover, a variety of classroom organisational structures could be used in order to deliver a differentiated curriculum. In some cases accelerated activities could be offered either in individualised or homogeneous group settings (Patrick et al., 2005). Teachers should be responsive to each pupil's changing needs and skills and carefully plan and modify their instruction (Connor et al., 2009) and as Jolly and Makel (2010) highlighted, 'rather than trying to adjust children to fit specific curricula, [teachers] should adjust curricula to fit specific children' (p.39). Finally, as Rogers (2007) emphasised 'each school […] must identify the grouping options that best match (a) the learners they have, (b) the attitudes of teachers about gifted learners, and (c) the attitudes of administration and the community to the possible options' (p.391).

3.2 UK background

Each of the four jurisdictions of the UK (England, Northern Ireland, Scotland and Wales) has its own different educational systems. Although they all shared some strong similarities with the English system in the past, Scotland and Northern Ireland have always had their distinctive systems (Florian &Rouse, 2009). Differences, however, in the national contexts may produce discrepancy in the ways schools manage their seating arrangements. Despite such differences though, 'the conceptual and philosophical problems of equity and education for all are shared concerns' (ibid., p.594). In order to address their respective concerns about equity or the ways to 'raise attainment in schools' and 'close the attainment gap' England and Scotland have adopted a variety of approaches.

Historically, the English education system, has been highly selective (Hallam et al., 2003; Ireson & Hallam, 1999). Most, if not all, secondary and large primary schools had developed an internal system of streaming (Hodgen, 2007). Specifically, as Jackson's (1964) study reported, 74% of schools allocated their pupils in different classes based on 'inferred ability' before the age of eight. Similarly, Barker-Lunn and Ferri (1970) found that the vast majority of English and Welsh junior schools surveyed chose to stream pupils. However, in the 1970s streaming became much less popular firstly as a result of research highlighting the social injustices stemming from such practices (Ireson & Hallam, 1999; Shuknhandan & Lee, 1998), and secondly of the publication of the Plowden Report (1967) which reviewed primary education in England and concluded that

> *'...it has now been generally accepted that it is impossible to assess accurately the potential of children of primary school age. The younger the children, the greater the inaccuracy is bound to be. We welcome unstreaming in the infant or first school and hope that it will continue to spread through the age groups of the junior or middle schools' (p.291)*

This trend towards 'unstreaming' continued for at least 25 years and by the 1990s the practice of streaming had nearly vanished from primary schools (Boaler et al., 2000; Hallam et al., 2003; Shukhnandan & Lee, 1998).

However, although in the 1990s most primary schools were organised in mixed ability classes (Lee & Croll, 1995), schools used other forms of ability grouping, such as setting or within-class ability grouping, mainly for reading and less often for mathematics (Shukhnandan & Lee, 1998). The notable increase of the primary (and secondary) schools adopting ability grouping policies throughout the 1990s (ibid.) can be attributed to the way teachers interpreted the National Curriculum (Hodgen, 2007) as well as numerous government directives which declared that as the National Curriculum is underpinned by the notion of 'stages of learning', it can most effectively be implemented if pupils are ability grouped (Shukhnandan & Lee, 1998). Moreover an 'increasing pressure on schools to raise the performance of their pupils, coupled with the publication of league tables reporting individual schools' performance on national attainment tests' has led to a firmer establishment of setting and within class

ability grouping (Burgess, Propper, Slater & Wilson, 2005; Davies et al., 2003). Illustrative of this is the then education secretary's, John Patten, announcement that in order to raise standards in primary schools, staff should consider: 'how to achieve a better match of work to children's needs-including the introduction of setting, where possible, and of grouping by ability, where setting is not possible' (GB.DfE, 1993, p.1), despite the fact that The Report of the National Commission on Education, *Learning to succeed*, urged that 'increased selection by ability must be discouraged if we wish to promote a less divisive society' (Gillard, 2008).

More recently, as Hodgen (2007) claimed the main political parties argued for the extension of ability grouping in schools (Guardian, 2006). In the Education White Paper (2005) *Higher Standards, Better Schools for all, More Choice for Parents and Pupils*, it is clearly stated that:

> *'Grouping students can help to build motivation, social skills and independence; and most importantly can raise standards because pupils are better engaged in their own learning. We have encouraged schools to use setting since 1997.' (DfES, 2005:58)*

However, within the UK, Scotland with its distinct educational system since the Scotland Act (1998), has been seen by many scholars as espousing values such as equality of opportunity and thus promoting an inclusive agenda (Hamilton & O'Hara, 2011). Scotland has preserved a principally comprehensive secondary school system, but problems of equity persist (Florian & Rouse, 2009; OECD, 2007). The Scottish education system has undoubtedly been influenced by policies generated for the rest of the UK focussing on school performativity. As Hamilton and O'Hara (2011) argued, there has appeared a rather 'muted government support' of setting in Scotland in the last decades. Indeed, research evidence (Hamilton & O'Hara, 2011; Davidson, 2001; McPake et al., 1999a; Smith &Sutherland, 2003) suggests that the popular assumption that setting narrows the range of abilities in class and thus raises pupils' attainment has gained considerable ground in Scottish primary schools too. The (re)-introduction of setting was quite explicitly supported in 1996 in the context of discussions attempting to 'meet the targets for attainment set by the Advisory Scottish Council for Education and Training Targets (ASCETT) for the year 2000' (McPake et al., 1999b). In the

Report *Achievement for All* (SOEID, 1996a), HM Inspectors reporting on the strengths and weaknesses of Scottish schools concluded that: 'If used effectively, both mixed ability and setting may be appropriate forms of organisation' and that 'in large primary schools, with more than one class at each stage, the effectiveness of setting pupils in P6 and P7 for English and mathematics should be carefully considered' (SOEID, 1996a, para. 5.4). The merits of setting according to the HM Inspectors are that it:

> *'• reduces the time spent by teachers managing the class, and enables more direct teaching to occur*
>
> *• reduces the compression of attainment ... by making it easier for each pupil to*
>
> *progress at an appropriate rate; and*
>
> *• allows more effective targeting and matching of teaching style and resources,*
>
> *including learning support, to pupils' needs.'*
>
> *(SOEID, 1996a, para 3.20)*

More recently The Right Honourable Jack McConnell MSP, a former First Minister of the Scottish Parliament, in a speech addressing Scottish head teachers stated that teachers should 'make more use of setting' (BBC, 2002).

Nowadays, despite the relevant debate about its educational outcomes and social consequences, setting and ability grouping remain common organisational structures in schools in England and Scotland (Florian & Rouse, 2009; Ireson, Hallam, & Huntley, 2005). Studies in both jurisdictions (Davies et al., 20003; Hamilton & O'Hara, 2011; McPake et al., 1999a; McPake 1999b) have observed a rather frequent use of setting and within-class ability grouping in primary schools. To be specific, a study by Hallam and Parsons (2014) comparing setting practices in the UK found that the proportion of children set for literacy were highest in Northern Ireland (39.5%) and lowest in Scotland (23.6%), while the proportion of children set for maths were highest in England (35%) and lowest in Scotland (27.5%). It is thus obvious that, as Ireson and her colleagues (2002) argued, schools are still caught between the two conflicting messages given by researchers on one hand who argue that there is no evidence that setting is effective and policy makers on the other, who continue to advocate its use (Ireson, Hallam & Hurtley, 2002).

Having discussed the merits and weaknesses of the various grouping arrangements, their implications for gifted education and the extent to which they have been used in the UK, the focus of the following chapter will be a discussion of gifted and talented policies in the world and in the two jurisdictions my study has focused, i.e. England and Scotland.

Chapter 4 **Policies**

It has been so far repeatedly argued that there is huge diversity of definitions and theories about the identification and provision for gifted and talented pupils internationally. Most of these definitions, theories and practices depend on the historical context, the political will and philosophical foundation of a nation, the view of intelligence and talent they denote as well as the state's or practitioners' stance on the dilemma of equity versus equality of opportunities (Freeman, 2011). In fact, research analysing who is identified as gifted and talented 'from different cultures shows considerable biases when looked at in terms of gender, ethnicity and socio-economic backgrounds' (ibid, p.1). Some countries for example defend children's right to be different, in which case special provision for those with learning difficulties and (occasionally) the gifted and talented is seen as the only way to cater for their needs. Others, however, argue that in order for education to be fair, it has to be similar for all. Therefore, selection or specialist provision is opposed to for fear of creating a privileged and undemocratic societal stratum (Persson, 2009).

Despite the fact that there are numerous models for the provision of gifted and talented pupils' needs, proposed by eminent researchers in the area, no country or even smaller jurisdiction has implemented a single model. This is understandable to a degree, as policy makers and educationalists realise that what may have worked for one country or a school will not necessarily work again in different settings, since there is no such thing as a 'typical school' (Eyre, 2003). Choosing the most suitable programme one should take into account the dominant political beliefs, the socio-cultural conditions, available financial resources, the targeted school population, the amount of students the programme will refer to and teachers' training and ability to implement the programme (Matsaggouras, 2008).

In the following paragraphs an overview of policies for the gifted and talented pupils in Europe will be given. Following that, a more detailed description of relevant policies and practice in England and Scotland will be given. Then the gap in relevant

research will be identified before carrying on with the description of the methodology of this piece of research.

4.1 International and European trends

The US

National interest towards the gifted and talented pupils in the United States of America was to a large extent driven by the Marland Report to Congress (Marland. 1972). Despite many attempts to address the matter of gifted education at a national level since then, there is still no clear policy and no common goals for the states to develop relevant programmes and procedures to promote the needs of this group of pupils. Thus, as Cramer (1991) remarked, 'throughout the country, programmes for the gifted range from excellent to non-existent, and state funds to support them range from millions of dollars to zero dollars' (p.84). This can be at least partly attributed to the fact there is no consensus among experts about the concept of giftedness and its various dimensions (Cramer, 1991). What is more, according to Sternberg (1996) key policy players in the US focus their attempts to the lower end of the continuum of abilities, which is partly demonstrated by the fact that the vast majority of state funding for special education is allocated to children with learning difficulties. In addition to that, in the (rare) cases where the need to do something for the gifted is recognised, practitioners tend to be content with only identifying them as such and not really serving their educational needs in any particular way. As a result, as Sternberg (1996) observed, many parents who can afford it, have enrolled their gifted children in private schools.

Despite these setbacks, enrichment programmes have been gradually established in most mainstream schools, but acceleration practices and early college entrance which used to be more widespread in the past, declined in popularity. Especially in times of financial crises they were disregarded, "because no one wanted more people on the street looking for work. A student in high school, at least, was probably not searching for full-time work." (Colangelo, Assouline & Gross, 2004b,

p.29). However, an encouraging development was the establishment of the Advanced Placement Programme (AP) in the 1950s by the Ford Foundation, which is still very popular. This is a programme enabling universities and colleges to give credits to high school children enrolling in their courses and was described in the previous chapter as a form of acceleration. Another positive development is 'the talent search revolution' (Colangelo et al., 2004b). Every year, pupils from grades 2-9 take exams, specifically designed to identify unusual academic ability. Those scoring above the 95th percentile are eligible for Talent Search programmes. These programmes offer gifted pupils out-of-school opportunities such as summer or weekend programmes, distance learning programmes, seminars and workshops or even specific subject courses, usually mathematics or language arts, which accelerate pupils up to two years (Moon & Reis, 2004). Such opportunities were described in more detail at the previous chapter.

Notwithstanding the opportunities described above, as Sternberg (1996) emphasises, education for the gifted and talented pupils is still sporadic, inconsistent and haphazard. As a result, many of the nation's gifted and talented, especially those coming from disadvantaged families or ethnic minorities, remain unidentified and their needs are not met.

Australia

In her review of the education for gifted pupils in Australia, Gross (1999) argued that most people believe it is not politically correct to foster the intellectually gifted, while the promotion of physical giftedness is highly acceptable. The misconception that gifted pupils are advantaged from nature and therefore they should not be offered more opportunities has affected many Australian practitioners' perceptions of and attitudes towards the gifted learner negatively. It has been suggested that this wariness of elitism and the view that an education which aims at excellence is antagonistic to the demand for equity originates in the country's history as a British penal colony, where society was segregated into two competitive classes, the 'privileged' and 'underprivileged' (Gross, 1999).

Despite the fact that the Senate Committee Report on the education of Gifted and Talented Children in (1988) declared that this is one of the most educationally disadvantaged groups in Australia and offered specific recommendations in order for their needs to be met, as the follow-up report conducted in 2001 (Senate Committee Report, 2001), the situation is not very much altered. The term 'gifted' still bears negative connotations to both professionals and parents, many educators are reluctant or not well-trained to cater for them and most importantly, there is still no relevant national policy regulating provision for gifted and talented learners. In fact, as Rowley (2012) underlined, although in 2005, the Australian Federal Government published an online 'Gifted Education Professional Development Package', every State and Territory has developed their own gifted education policy and set of practices. Currently, their Department of Education (NSW DEC) uses definitions drawn from Gagné's (2003) Differentiated Model of Giftedness and Talent that distinguishes between giftedness as an embryonic natural ability, and talent as its mature, developed version (Fraser-Seeto, 2013). Nevertheless, since the late 1990s and especially after the establishment of the Australian Association for the Education of the Gifted and Talented (AAEGT), a more focused approach to the provision for gifted and talented pupils has ensued. All states recognise the need to offer those pupils some opportunities, the programmes developed are more carefully designed and scrutinised, a number of enrichment and acceleration practices have been observed and schools are advised to offer gifted pupils homogenous grouping opportunities when necessary (Gross, 1999). Noteworthy is also that traditionally gifted and talented provision has taken place in selective settings, at special schools or classes. These opportunities however are available only to a limited number of pupils, and therefore the majority remains unrecognised and unaccommodated (Fraser-Seeto, 2013). Therefore, what is required is a well-orchestrated national approach to gifted education, with more reliable opportunities of curriculum differentiation and enrichment offered in mainstream schools. In order for this to materialise, professional development of pre- and in-service teachers is of the utmost importance (Fraser-Seeto, 2013; Rowley, 2012).

Canada

All levels of education, except for higher education (colleges and universities), are under the sole responsibility and control of each province and territory in Canada. There is therefore no national legislation guiding schools how to provide for their gifted and talented learners (Lupart, Pyryt, Watson & Pierce, 2005). Instead, there is a wide array of policies, ministerial directives and recommendations within each jurisdiction (Kanevsky & Clelland, 2013). Nevertheless, in their research examining policies and directives in all provinces of Canada, Kavensky and Clelland (2013) discovered that only five provinces have made some publications supporting the educational provision for gifted pupils; Saskatchewan is the only jurisdiction mentioning gifted education in its education act, and Alberta has produced the most extensive documentation in that matter. However, another five provinces and all territories had not produced any relevant policies addressing the needs of gifted students explicitly. Overall, there was great variation among the jurisdictions in the scope and content of their policies (Kavensky & Clelland, 2013). It is therefore very possible that one pupil may be identified and catered for in one province and not in another (Lupart et al., 2005).

Indeed, several researchers discovered the use of different identification procedures in each district and different programmes for provision. Most programmes favour the use of differentiation and enrichment activities, while others enable the use of acceleration and participation in Advanced Placement Programmes (Kavensky & Clelland, 2013; Lupart et al., 2005). There are several private schools with the express intention to provide for the needs of gifted and talented pupils and the University of Calgary, located in Calgary, one of the largest cities of Canada, has developed a Gifted And Talented Education (GATE) programme, which enables pupils from elementary and high schools in the area to participate in after-school classes focusing mainly on numeracy and literacy (Freeman, 2002). Although the fact that the development and implementation of relevant policies relies on districts allows for much flexibility and responsiveness to the context of each community, it has the disadvantaged of too much discrepancy among the programmes offered in schools throughout the country. This makes it even harder to evaluate the effectiveness and reach meaningful conclusions about the provision services offered overall at a national level (Lupart et al., 2005).

Finally, it is clear that the fate of gifted and talented pupils relies mainly on the chance factor of the geographical area they live in.

The EU

Although, all European countries have acknowledged the fact that some children have exceptional abilities and that they should be provided with opportunities to develop them within the educational systems, there are several contrasting views on how best to cater for their needs. Freeman (2005) distinguished European approaches to gifted education based on the cultural and political divide of Eastern and Western countries. To clarify this split, she identified two general approaches, the 'Far Eastern' and the 'Western' (Freeman, 2005). According to the first, everyone is born with the same potential and the differences between people result from environmental factors such as teachers' effectiveness and children's hard work (Freeman, 2002). The Western approach on the other hand, considers genetic factors as dominant determinants of one's abilities and intelligence. However, as Sekowski and Lubiank (2013) counter-argued, nowadays, in the era of globalisation, when most European countries are members of the European Union, fewer discrepancies can be attributed to this divide. At present, national approaches do not stem from the geographical position of a given country but relate to the aspirations and assumptions which underpin their educational systems.

Recent publications have pointed out that there is a growing trend to promote gifted and talented education in Europe (De Boer, Minnaert & Kamphof, 2013; Rasmussen & Lingard, 2018) on the basis that if the European 'economic lead, with its associated prosperity, is to be maintained, then this will come about by the fostering of top talent' (De Boer et al., 2013, p.136). A manifestation of this trend is the ever growing use of large-scale (international) testing for comparative purposes and the expansion of special programmes addressed to the provision for gifted and talented pupils (Rasmussen & Lingard, 2018). According to a report conducted by the European Commission (2006), national approaches to the education of gifted and talented pupils in Europe could be placed on a spectrum of measures which at one extreme rely exclusively on mainstream education and at the other on specialist

provision (outside mainstream schools). In the first case, the state is clearly committed to an 'integrated' policy for gifted learners; no specific term is officially used to describe them and there are no guidelines to determine who is or is not 'gifted'. No particular educational measures are introduced to provide for them either, and instead, their educational needs are met through an individualised differentiated approach in mainstream classes, just like all pupils' needs (European Commission, 2006). Norway mainly along with Sweden, Finland, Iceland and Malta are closest to this end of the spectrum. At the other extreme, an official term is used in national policies to refer to gifted individuals collectively. There are specific criteria set to enable educators to determine who is gifted, which are mostly based on performance and attainment often in combination with results from aptitude tests. In this model, various special measures are embedded in a legislative framework, while gifted pupils are mainly educated in homogeneous groups or classes. Although most countries do not adopt this approach fully, Poland, Latvia and the Czech Republic are closer to it, offering numerous special measures exclusively to gifted pupils and having several (secondary) specialist schools which focus on the development of different kinds of talent (European Commission, 2006). Most national policies in the EU however, lie between these extremes, adopting an approach which combines inclusive strategies in mainstream education and a number of mainly out-of-school special opportunities (European Commission, 2006). Besides, the guidelines agreed to by the Council of Europe in 1994 are very broad and allow for numerous interpretations:

> *'Gifted children should be able to benefit from appropriate educational conditions that would allow them to develop fully their abilities, for their own benefit and for the benefit of society as a whole. No country can indeed afford to waste talents and it would be a waste of human resources not to identify in good time any intellectual or other potentialities. Adequate tools are needed for this purpose.' (Recommendation 1248, 1994)*

Indeed, as Persson (2009) commented, most European endeavours 'in the area of Gifted Education have concentrated on alerting policy-makers to the students' special needs and encouraging legislation for its implementation' (p.2) and despite the fact that there is no single European approach to the provision of gifted and talented pupils' needs, there is a degree of convergence between the European countries in that

they all promote inclusion. Therefore, education for those pupils is "mainly education pursued in inclusive settings" (Persson, 2009, p.5).

4.2 England

The English education system is fairly centralised (Keep, 2006); indeed the dominant trend since the 1980s has been the concentration of powers to the state, specifically the central government. The rhythm with which this centralisation of powers has taken place has fluctuated over the decades, sometimes waxing and others waning. It is nevertheless clear that the central government's power in education has increased significantly. As a result, national school curricula (primary and secondary) are centralised too, national tests have been imposed in order to assess the quality of education provided in schools, and determine the funding each school receives (European Commission, 2009), national regimes for the inspection of schools, controlled by the central government have been established (Ofsted for example), a range of national learning targets have been created upon which schools assessed by inspectorates are evaluated and finally local education authorities' (LEA) powers over and responsibilities towards local schools have been reduced (Keep, 2006). As a result, as Keep (2006) argued,

> *'The state now possesses the legal power and administrative capacity to intervene in detail in what gets taught to whom, using what level and type of certification, and to direct how this learning process is funded, conducted, monitored, inspected and managed.' (p.49)*

At the same time, social partners' ability to influence policy has been diminished. Instead, any new agencies involved in education governance have been created and are sustained by ministers of the central government. As Keep (2006) eloquently remarked,

> *'Ofsted, Adult Learning Inspectorate (ALI), the Quality Improvement Agency for Lifelong Learning, and the Learning and Skills Council (LSC) and its 47 local learning and skill councils are all, financed primarily by central government, with governing bodies or councils appointed by, and solely responsible to, the Secretary of State for Education and Skills.*

> *They do not work with the DfES (LSC, 2005, p. 11), they work for it.' (p.50)*

Around the 1970s comprehensive education was being increasingly accused of lowering the educational standards and for failing to produce a literate workforce. Tomlinson (2005) suggests that underlying these accusations, was the political right's concern that the equal educational treatment of groups destined for lower levels of education and lower status jobs would undermine the authority of the state. It was these issues that set the scene for the massive educational reforms of the 1980s (Tomlinson, 2005). For example, the 'Assisted Places Scheme' which was introduced by Thatcher with the 1980 Education Act, allowed academically able children of low economic background to attend private schools, furthering thus the privatisation agenda and "demonstrating how it is aimed at benefiting the few rather than the many" (Power & Whitty, 1999). This Act is illustrative of the Conservative government's view that comprehensive state schools are unable to offer adequate education and that the few 'deserving' poor should be assisted to share the privilege of high quality private education with the deserving rich (Tomlinson, 2005).

Later, one of the first most significant educational reforms, the Education Reform Act 1988 (ERA) was enforced, and is still considered very controversial. This reform introduced explicitly stated standards for schools and students, public accountability local school management, and a degree of parental choice in selecting schools for children. The means of introducing many of these aspects was through the National Curriculum and, alongside it, a set of assessment arrangements (Tomlinson, 2005). Prior to this, teachers, schools, and local authorities had determined the curriculum locally. It was the view of Government that the National Curriculum would be insufficient to improve school standards without measurement of students' progress at regular intervals through national testing (European Commission, 2009). The National Curriculum standardised and determined what was taught (and tested) in public sector schools "in a way that had no precedent in the educational history of these countries" (Paterson, 2003. p.167).What is more, in order to ensure parents' awareness of the options before them, the government established the publication of tables of performance, thus encouraging competition among schools, arguing that this would improve teachers' effectiveness. The same criteria were used to assess and

measure every school's performance. Everything was justified on the basis of improving standards, of comprehensive secondary schools especially, towards which the Conservatives had always been antagonistic.

Most of these reforms, and especially measures such as the Assisted Places Scheme, the national testing, the publication of schools' results, and the private schools' increased freedom in selecting their pupils by ability, are illustrative of the hegemonic (conservative) conception of ability at this period. Specifically, it seems that the Conservative Party was hostile towards a flexible model of potential and instead favoured a measurable conception of 'ability', which considered would be more effective in managing educational provision (Pring & Walford, 1997 in Hamilton, 2002). The very evident support of the government for the private sector of education as well as the belief that ability is determined mainly by nature and that it is thus measurable and relatively stable, established "the way in which the state might interact with ability within policy and schools and impact upon individuals" (Hamilton, 2002, p.592).

By the mid-1990s income inequalities had dangerously increased and the gap between rich and poor families widened. What is more, low income families were increasingly concentrated in certain areas, especially in inner cities and outer rings (Tomlinson, 2005). As the Child Poverty Action Group demonstrated, it was the choice and diversity policies that particularly increased divisions and inequalities in provision (Smith & Noble, 1995). Notwithstanding this evidence, the Conservative government developed a 'failing-schools legislation', attacking the "failing-schools", most of which were serving disadvantaged working class areas. According to this legislation, schools which could not reach the government's targets for exam results, had financial difficulties and problems with their pupil intakes, were likely to be put 'under special measures' at the instigation of Ofsted (Tomlinson, 2005).

It has been argued by many authors (see for example Tomlinson 2005) that despite their supposed differences in ideology and rhetoric, not only did the New Labours not discard most of the conservative legacies, but they embraced them. Examples of such policies are: a) the devolved funding, because of which the budget

of a school is analogous to the number of pupils it has attracted, b) diversity and competition among the schools -Illustrative is the fact that some City Technology Colleges and Grant-Maintained schools have been allowed to select more pupils by ability when entering school-, c) the imposition of a national curriculum which is centrally controlled through inspections and standardised pupils' tests at the end of key stages, d) the equation of 'standards' with measurable outcomes in externally examined tests, and f) the accountability, surveillance and control. (Gillborn & Youdell 2000).

In the period between 1997 and 2000 a substantial number of education policies were voted by the New Labour government (Ball, 1999). Along with the 'Sure Start' scheme, which provided educational support for infants living in difficult family or economic conditions, and minor cuts in the class sizes of the first three years of primary schools, the Labour government introduced a mandatory entry-school test for five-year-olds, while at the same time preserving the Conservatives' standardised tests for elder pupils. Furthermore, schools were encouraged to organise their classes according to the measured ability of the children, as mixed-ability teaching was believed to harm standards. Also, since classes were more homogeneous with respect to ability, teachers were encouraged to teach to the whole class, rather than working with sub-groups or individuals within it. This teaching style was believed to offer more appropriate challenges to the full range of learners (Paterson, 2003).

Following the reforms which took place in the 1980s- early 1990s , research evidence repeatedly warned about the significant rise in the number of children from deprived areas who performed worse on public examinations compared to those coming from more affluent areas. In this context, the recently elected Labour government launched in 1999 the 'Excellence in Cities' (EiC) policy in order to tackle disadvantage and promote social mobility. Within this policy, one of the most important milestones for the educational provision of gifted and talented pupils was created, emphasising the need to enable these pupils (especially the underprivileged ones) to reach their potential (Casey & Koshy, 2012). Preceding this development, the need for provision for this group of pupils had been highlighted in Her Majesty's Inspectorate reports (HMI 1978, 1979 and 1992), as well as by organisations such as

the National Association for Able Children in Education (NACE) or the National Association for Gifted Children (NAGC) (Freeman, 1995). Although with the EiC policy provision for the gifted and talented pupils' needs was not made mandatory, it was the first legislation in the country which set clearly the expectation that teachers should take the necessary steps to cater for them (Casey & Koshy, 2012).

The government's declared commitment to improve provision for gifted and talented pupils can be identified in the schools minister's, Estelle Morris (1998) statement that:

> *'The government is committed to improving educational standards for all children….we fail to identify many of our most able children and we don't challenge them enough. We owe it to these children to help them realize their potential. That means working with schools, parents and local authorities to establish practice. We must celebrate the abilities of our most able children and encourage them to achieve at the highest level. The attitude that gifted children can cope with themselves has let down too many young people.' (DfEE Circular 413/98 as cited in Koshy, Pinheiro-Torres & Portman-Smith, 2012, p.3)*

Following these developments, teachers in state English schools were expected to identify their gifted and talented pupils and create registers. Moreover, the government granted considerable funding to reinforce the implementation of the EiC policy in 80 out of the 150 LEAs. With this funding schools were expected to improve their (teaching) resources and challenge their gifted and talented pupils as well as encourage the development of a variety of talents, ensuring thus that all pupils realise their potential (Casey & Koshy, 2012). A few years later, the policy was extended to include all schools in all LEAs in England and in order to make sure that it would be properly implemented, the government appointed Gifted and talented coordinators both in local authorities and schools who would be accountable for relevant provision in their areas (ibid.).

Another very significant development was the establishment of the National Academy for Gifted and Talented Youth (NAGTY) at Warwick University in 2002, which was responsible to lead, deliver and support the implementation of the policy

nationally. It was specifically responsible to identify 'the top 5%' of secondary school pupils and offer them targeted opportunities, such as summer schools, 'outreach regional and local provision and online study groups and forums' (Campbell, Muijs, Neelands, Robinson, Eyre & Hewston, 2007). It moreover, supported teachers with online training and the development of guidance material and teaching resources, professional development courses and subject-specific guidance (Casey & Koshy, 2012).

The distinctive feature of the English model for the provision of the needs of gifted and talented pupils was its commitment to be embedded in the mainstream education. As the director of NAGTY (Eyre, 2004) underlined:

> *'Traditionally gifted education has been seen as divorced from the general education system, yet if a country's education system seeks to provide appropriate education for all its children, then the education of the most able (gifted) should be seen as just one part of a larger whole. This in itself should provide a compelling case for a nationally coherent and integrated approach to the education of the gifted. However there are reasons that transcend education policy that suggest that a country would be well-advised to give gifted education a more central location. Today's gifted pupils are tomorrow's social intellectual economic and cultural leaders and their development cannot be left to chance. Where it is left to chance, evidence indicates that educational progress is not so much a question of intellectual merit but rather a question of affluence, with the most affluent receiving the best education and therefore achieving most highly.' (Eyre, 2004 as cited in Eyre, 2009, p.1048)*

This statement also highlights a commitment to equity by challenging the widespread myth that gifted pupils can only be spotted in higher social strata and an ambition to counter the socioeconomic factors which have led underprivileged pupils to underachieve (Campbell et al., 2007). Of vital importance to this end was the fact that the academy did not introduce a single test to identify pupils, but opted for a use of a wide array of evidence, such as portfolios, teacher-, parent- and pupil- nominations and performance tests, including awards in competitions and so forth. This approach reflects the theoretical position that giftedness is multifaceted and therefore multiple criteria for the identification of gifted and talented pupils should be used (Campbell et

al., 2007) (Chapter 1). To sum the purposes underpinning the development of the English Model are threefold; first, a concern about catering for all pupils' needs, second 'an economic concern about realizing potential' (Rasmussen & Lingard, 2018, p.886) and third, a commitment to social equity which highlights the importance of identifying talent in unrepresented groups (ibid.). However, as Rasmussen and Lingard (2018) pointed out, the first and third purposes have been proven hard to achieve. With regard to social equity, the main barrier has been the way middle-class elite groups manage to 'challenge the meritocratic functioning of education' by improving their children's chances to get the best of education which 'demonstrates the power of cultural capital in accessing public service benefits' (Rasmussen & Lingard, 2018, p.886). In addition to that, the independent sector in England responded promptly to the growing demand for elite schools by specialising and advertising their high academic standards and success rates in admission to elite universities (ibid.) and setting up highly selective entrance processes thus attracting higher numbers of gifted and talented students, hence antagonising the English model (Rasmussen & Lingard, 2018). Finally, despite the fact that the English model includes an equity argument, its critiques have concluded that it contains mainly 'an economic rationale of promoting competitive advantages of individual students, which is then supposed to contribute to driving up performance in the knowledge economy' (Rasmussen & Lingard, 2018, p.886).

After five years, NAGTY closed and responsible for the national coordination of gifted education became the Centre for British Teachers. The amount of pupils identified as gifted and talented was extended to the top 10% and schools were expected to draw explicit policies outlining their gifted and talented programmes, identify their most able pupils and introduce a 'distinct and discernibly different teaching and learning programme to address the needs of these pupils' (Casey & Koshy, 2012, p.47). What is more, enrichment opportunities were offered through the Regional Partnerships for Gifted and Talented Education and the Excellence Hubs; e.g. summer schools, short term workshops and online activities (Koshy et al., 2012).

Despite these positive developments some radical changes at both national and regional level took place after 2010. The National Strategies team, which trained

teachers and provided them with professional development materials, was disbanded, the funding for the Regional Partnerships and Excellence Hubs was withdrawn, most LEA services for gifted and talented education were cut, the great majority of Gifted and Talented Coordinators were discharged and the school funding for the promotion of gifted and talented programmes was withdrawn (Casey & Koshy, 2012). Even experts in the area acknowledged that although gifted and talented education policies raised teacher awareness on the needs of these pupils and offered the latter with some valuable opportunities, it was 'inconsistent', 'incoherent' and its impact in schools was 'patchy' (House of Commons, 2010). In fact, as Eyre further explained: 'There are a variety of stakeholders who have goals and purposes for a gifted and talented programme. They have no intention of working with each other and sometimes work in opposition to each other' (House of Commons, 2010, p.2). As a result, the available opportunities for gifted and talented pupils shrank considerably, but inspectors still monitor the effectiveness of schools' provision for these pupils and government officers make statements about the failure of schools to challenge them (Casey & Koshy, 2012).

Nowadays, the education of gifted and talented pupils relies heavily on schools and teachers' willingness and decisiveness to make appropriate provision, despite the lack of funding and support from the state. There are only two sets of self-evaluation guidelines circulated to all English schools, the Institutional Quality Standards (IQS) and the Classroom Quality Standards (CQS), devised to enable practitioners to evaluate their effectiveness in catering for gifted and talented learners, but still inspection reports highlight that provision for 'able pupils in state-funded schools is far from satisfactory' (Ofsted report, 2013). The HMI Chief Inspector Sir Michael Wilshaw, said:

> *'Too many non-selective schools are failing to nurture scholastic excellence. While the best of these schools provide excellent opportunities, many of our most able students receive mediocre provision. Put simply, they are not doing well enough because their secondary schools fail to challenge and support them sufficiently from the beginning. I believe the term 'special needs' should be as relevant to the most able as it is to those who require support for their learning difficulties. Yet*

> *some of the schools visited for this survey did not even know who their most able students were. This is completely unacceptable'. (Ofsted's response to the report, 2013)*

4.3 Scotland

The aim of this section is to identify the reasons why education is an important aspect of policy-making in Scotland, to consider the aspects of education which are most valued by the Scottish Nation, as they appeared in the results of the National Debate which was held in 2002-2003, and how they have shaped current political debate and influenced the origination of educational policies. Furthermore, an attempt to identify the reasons why Scotland gradually showed an interest towards the needs of able pupils and the key policy documents that arose from this interest will be made. In the evaluation of these documents' effect on school practice the importance of the people involved and the approach followed in the process of policy making will be considered. Finally, the effect of these key documents on shaping Local Educational Authorities and school policies will be assessed and an attempt to interpret the reasons why there has been diversity among them will be made.

Education in Scotland

Education in Scotland is considered to be the central pillar of Scottish identity- the other being the church ('Kirk') and the Law (Paterson, 1998). Even before devolution in 1999, Scotland had a quite autonomous educational system (Florian & Rouse, 2009). Although during the Thatcher era (1980-1990) there was an attempt to introduce policies originating in England, the educational systems in the UK were never uniform and Scottish politicians defended the distinctive character of their traditions. Post-devolution the critical role of education in the success of Scotland has been acknowledged by all parties (Humes, 2008) and the Scottish people had high expectations that the new parliament would improve education (Paterson, 1998). What is more, devolution was seen, amongst others, as an excellent opportunity for Scotland to improve social policy and welfare (Mooney & Scott, 2005). Indeed, D. Dewar, the inaugural First Minister of Scotland, declared his commitment to inclusion by stating that 'This Government is determined to take action to tackle exclusion, and to develop

policies, which will promote a more inclusive, cohesive and ultimately sustainable society' (Mooney & Scott, 2005, p.7-8).

Prior to devolution, the group responsible for the provision of education in Scotland was the Scottish Office Education and Industry Department, which was under the control of the Westminster Parliament. After devolution education policy came under the exclusive control of the Scottish Government, and it was the duty of the thirty two local authorities to provide and shape school education (Humes, 2008). Compared to England, the Scottish educational system enjoys relative uniformity. All local authorities offer a remarkably similar pattern of schooling, most state schools abide by the national guidelines regarding the curriculum and assessment and they are subject to the same procedure of inspection. High schools take the form of all comer comprehensives and are expected to draw on young people from diverse catchment areas. As Riddell (2009) pointed out, 'the Scottish education system is based on the egalitarian idea that, with the exception of separate faith schools for Catholic children, all children should have access to a common curriculum in equally well-resourced schools' (p.288). Nonetheless, it has to be acknowledged that because of the relative affluence or poverty of many catchment areas, high schools may have high numbers of high SES pupils while another school may have a high incidence of low SES pupils. These distinctions can challenge the supposed egalitarian principles such schools were built on, since the problems faced by schools in deprived areas are very different from those in more affluent communities (Humes, 2008).

Over the last 200 years, the aim for Scottish education policy was to promote more comprehensive, non-selective education for every child (Gillies, 2008; Mooney & Scott, 2005; Riddell, 2009). This aim was in accordance with a widely held belief in Scotland that education is a public good which must be provided to everyone by public means. Therefore, a radical change in the structure of education in Scotland would not have been welcomed by the public and this was reinforced by the results of a consultation exercise built around the idea of national education debate (Munn, Stead, McLeod, Brown, Cowie, McCluskey, Pirrie & J. Scott, 2004). As a result, the fact that the priority for most parties has been the opening up of the education system for all and not the challenging of the public opinion, meant that even the most left-

wing radicals' educational programme was fairly mild, not aiming at a more fundamental change of the nature of the system itself (Paterson, 2003; Mooney & Poole, 2004). More recently, parties view education as a key component of overall political strategy, 'linked to a range of other policies- on economic development, responsible citizenship, environmental awareness, health promotion and social capital' (Humes, 2008, p.72).

Summing up, it could be argued that there is a considerable level of agreement among the Scottish parties regarding the priorities in education. Despite differences in the degrees of emphasis and the ways to implement policies, there is broad consensus on the humanist, vocational and social purpose of education. However, as Gillies (2008) claims, the crucial questions of the aims and purposes of school provision have generally been abandoned, and nowadays political debate focuses mainly on administrative and managerial issues as well as concerns about performance "rather than on any clash of fundamental values" (Gillies, 2008, p.86).

The Debates on Education (National Debate, 2002 and Current Debates)

This broad consensus is also apparent from the results of the National Debate on Education in Scotland which took place in 2002. It was generally acknowledged by all respondents that comprehensive schooling was quite successful in the education of pupils 5-18 years old, and that accordingly, the teaching workforce was characterised by high quality and professionalism in an all graduate profession. What is more, the socially inclusive character of comprehensive schools was supported and, while some room for improvement was identified by most respondents, "there was no demand to change the basic structure of schooling" (Munn et al., 2004, p.441). Some of the areas identified as in need of improvement were pupils' behaviour, resources and the curriculum for secondary education. Regarding the curriculum, respondents highlighted flexibility, relevance, choice, the restrictive effect of examinations and assessment, and meeting individual needs, as the areas where future curriculum reform should focus on (Munn et al., 2004). Finally, as the inquiry into the Purposes of Scottish Education led by the Committee for Education, Culture, and Sport of the Scottish Parliament, reported:

> *'…There was widespread support for a broad view of educational purposes including the promotion of positive values and active citizenship. […] Education should seek a balance between cohesion and diversity, but the general view was that promoting social cohesion should be seen as the more important priority. […] It was agreed that Scotland's non-selective system of schooling […] comprehensive education, has been successful in raising aspirations and levels of achievement.' (Education, Culture and Sport Committee, 2003, p. 4).*

Currently the political debate on education centres around three broad areas. First of all, it centres on the instrumental economic role of education, which views educational provision as the state's investment in its human capital. This means that the aim of schooling is primarily to give its future citizens those skills that are needed in order to create economically productive members for the knowledge economy. As Gillies (2008) argues, more emphasis has been recently given to the acquisition of skills than to education in a broader sense and it seems that the aim behind the state's commitment to lifelong learning is not the development of the individual learner but rather his or her training in order to be a more flexible employee, able to adapt in ever changing employment patterns (Gillies, 2008). Examples of the influence instrumental economic aims have had on the development of the curriculum (Curriculum for Excellence) in Scotland are the following:

> *'Like other countries, we face new influences which mean that we must look differently at the curriculum. These include global social, political and economic changes, and the particular challenges facing Scotland: the need to increase the economic performance of the nation; reflect its growing diversity; improve health; and reduce poverty. In addition, we can expect more changes in the patterns and demands of employment, and the likelihood of new and quite different jobs during an individual's working life. (Scottish Executive, 2004, p.10)*
>
> *The outcomes we seek to achieve through this programme of reform will be […] more skills-for-work options for young people, robustly assessed and helping them to progress into further qualifications or work.' (Scottish Executive, 2004, p.4)*

For these reasons the political debate appears to focus on how class sizes, the curriculum and a specialism adopted by a school can improve assessment results and attainment levels (Gillies, 2008).

Another area of debate on education can be linked to social concerns. The view of education as a means to take social welfare action has influenced the political debate (Moone & Poole, 2004; Moone & Scott, 2005). For example, the issue of inclusion has been one of the main areas discussions on education have centred on. The demand for an education suitable for all pupils, regardless of their background and abilities, is based on political arguments about the common good and the rights of the individual (Mooney & Scott, 2005). For instance, the Scottish Executive's vision for education is "A Scotland in which every child matters, where every child, regardless of his or her family background, has the best possible start in life" (Scottish Executive, 2004, p.6). What is more, most parties have claimed their determination to address the issue of very low performance (20% of the population) in terms of academic qualifications. Nevertheless, as Gillies (2008) none of the major parties has taken the radical steps needed to tackle the fundamental socio-economic inequalities which cause educational disadvantage. Instead, politicians seem to console themselves with the notion that schools succeed in fighting social disadvantage and offer equal opportunities for all (Gillies, 2008; Mooney & Poole, 2004; Riddell, 2009).

Finally, another major area for debate is the question of finances. A legacy of the Thatcherite era is a determination to keep taxes at low levels together with a resolution against spending public money. It seems that the last governments have been reluctant to spend more public money even for what they consider as the public good. Thus there is considerable debate in education about student grants and finance, the restoration of school buildings etc. (Gillies, 2008).

In conclusion, although the origins and aims underpinning a policy are very important, their success or failure depends very much on the way these policies are viewed by the people involved in education. Most major reforms are supported by 'intermediate' staff, teacher education institutions and local authorities, who work together to develop explanatory additional material in order to promote approved

policies at schools throughout Scotland. It is for this reason that policy implementation is a complex and rather unpredictable process (Ball et al., 2012). Often levels of awareness and most importantly levels of receptiveness to new policies and the rationale behind them varies across practitioners and there may also be issues of resources and staffing affecting implementation. Finally, the role of 'intermediate staff' is ambivalent in a sense that they have to drive forward the changes promoted at national level by policy-makers but to also show some understanding and support to the pressures teachers face at local level (Humes, 2008).

Inclusive Education and provision for highly able pupils

In the following paragraphs the origins and content of policies regarding the educational provision for the needs of highly able (or gifted and talented) pupils in Scottish schools will be described and an attempt to apprehend the reasoning which has led to the establishment of such policies and to evaluate how they have been received by local educational authorities and schools will be made. In this section, instead of the terms ‘giftedness’ or ‘gifted and talented’ which have been used so far, the terms ‘high ability’ and ‘highly able pupils’ will be used, since most relevant policies within Scottish Education adopt this terminology (Sutherland & Stack, 2012.). By these terms, according to a recent publication by the Scottish Network for Able Pupils (see below for more), they refer to pupils who work or can work ahead of their age peers across the curriculum or in specific areas (Sutherland & Stack, 2012).

The education of highly able pupils in Scotland as in most countries all over the world is perceived as central to the objective of a more inclusive educational system (Sutherland, 2011). As Mintz and Wyse (2015) argued, the increasingly dominant trend on how to deal with individual differences among pupils in the mainstream classroom, is the adoption of an ‘inclusive pedagogy approach’ (p.1162). Scotland’s commitment to inclusion is affirmed by its endorsement of the UN’s Convention on the Rights of the Child in 1991 and the European Convention of Human Rights (ECHR) (1953), as well as by the ratification of national legislations such as the Disability Discrimination Act/ Accessibility Strategy, the Education Additional Support for Learning (Scotland) etc. (North Lanarkshire, 2014; Sutherland, 2011). What is more ‘Inclusion and Equality’ is one of Scotland’s five national priorities in

education (Scottish Government, 2003). Building on this tradition, Scotland has more recently endeavoured to move special education to a broader and more inclusive paradigm, by questioning and reshaping the conventional conception of 'special needs' (Florian & Rouse, 2009; Riddel & Weedon, 2010)

Before proceeding with a detailed analysis of the relevant major legislations, an outline of what constitutes Special Educational Provision in Scotland will be given. As Clark (1997) summarises, although it is controlled by the Scottish government and complies with Scottish legislations, much responsibility has been assigned to Local Authorities. The latter are responsible for the identification of pupils who face a barrier to learning (Scottish Executive, 2004), for conducting continuous reviews and making efficient provision for them. In addition, a co-ordinated support plan (CSP) must be decided for those with long-lasting needs who require support from agencies besides education. "The plan will focus on supporting the child to achieve learning outcomes and assist the co-ordination of services from a range of providers" (Scottish Executive, 2004). It should be noted here that the term 'Additional Support Needs' has replaced the more traditional one, 'Special Educational Needs', as it is broader and comprises any pupil who, "for whatever reason, requires additional support for learning" (Scottish Executive, 2004).

According to the Scottish orientation to education, or 'myth', as it has been described by Paterson (1998), high-quality education is viewed as a right and should therefore be available to all. As a result, the independent school sector is very limited and selection for admission to state schools has been abolished. Additional educational provision occurs within mainstream or special schools. In the first case, a learning support teacher usually works in partnership with the class teacher to support individual pupils. Noteworthy is that although special education was first introduced for the provision of children with cognitive difficulties and physical disabilities, nowadays 'Additional Support for Learning' is offered to any pupil who is faced with difficulties in education resulting from socio-emotional problems, or family and care circumstances, and even to bilingual and highly able pupils. (Clark, 1997; Scottish Executive, 2004).

To this development, and especially to the recognition of the need for additional support for the education of highly able pupils, crucial role played a gradual change in the conceptualisation of intelligence and ability. There has been a longstanding debate in the UK, and internationally, regarding the nature of ability and whether it is fixed or can be developed (Chapter 1). It appears that a restricted view of intelligence and ability has lost ground to a broader one which stresses the importance of a rich educational experience in the development of pupils' potential (Hamilton, 2002). Most teachers currently recognise that pupils learn in different ways and that they have to reshape their teaching programmes in order to meet the diverse range of needs in their classes. This view of intelligence as fluid and capable of development is central to an inclusive educational approach (North Lanarkshire, 2014).

The Education of Able Pupils P6-S2

Her Majesty's Inspectorate's (HMI) report in 1993 regarding 'The Education of Able Pupils' in Primary 6 to Secondary 2 education was one of the first coherent attempts to address the issue of the education of highly able pupils at national level in Scotland (Stack & Sutherland, 2014; Sutherland, 2011). Embarking with the principle of "providing appropriate learning experiences for all pupils" (Scottish Office, 1993, p.1), the Inspectorate set out to investigate to what degree the needs of able pupils were being met in Scottish schools. Education authorities and schools were investigated in order to determine to what extent they recognised the importance of nurturing high ability in their policies and teachers were interviewed concerning their views on the identification and provision for able pupils. First of all, it was understood that "there was no consensus [among education authorities] about what constituted 'effective provision' for able pupils" (Scottish Office, 1993, p.3). Although all authorities acknowledged the need for schools to provide "for the whole spectrum of abilities […] including able pupils" (Scottish Office, 1993, p.3), none but one had developed a specific policy to meet their needs. However, all agreed that it would benefit teachers to receive informed advice on how to reform their strategies in order to "provide more effectively for able pupils" (p.3). Despite these statements however, it will be subsequently argued that the landscape of the provision for highly able pupils has not changed very much since the publication of this report.

Secondly, it was reported that schools had general policy statements of intentions which showed an awareness of the importance of catering for all pupils' needs. However, despite the fact that specific guidance was both given and implemented for the education of pupils with learning difficulties, similar priority was seldom given to able pupils. There were very few specific (school) policy statements about the identification of able pupils, and indeed "many headteachers had deliberately avoided producing such statements on the grounds that this might be perceived to be elitist and divisive" (Scottish Office, 1993, p.4). This fear or prejudice against the education of highly able pupils is a common phenomenon around the world and especially in Scotland, where, as Hamilton (2002) argued, there is a very powerful self-view of education "as a high quality and equality promoting system". Such a view of the purpose of education would be easily perceived to be against the -mistaken- view of high ability education as elitist (Chapter 1).

Finally, the investigation of teachers' views demonstrated that they were uncertain and hesitant when requested to identify able pupils. This was partly attributed to a lack of awareness of the characteristics of highly able pupils. What is more, teachers felt more comfortable in identifying outstanding ability in aesthetic or creative areas, while in cognitive areas they "identified 'good-all-rounders', [that is] pupils who performed well in a range of academic disciplines" (p.4) and especially in mathematics and science. It was also suggested by the findings of the report that teachers were hesitant in identifying highly able pupils because they considered the evidence available as insufficient to base their assessments on. On the other hand, some secondary school teachers argued that they were more confident to identify S5 and S6 able pupils, "because at these stages evidence was available from external examinations". However, such examinations do not offer a broad and reliable insight in pupils' potential. Last, it is noteworthy that some teachers had a tendency to "adopt stereotyped views about pupils' potential" (p.5), in a sense that they assumed, for example, that there would not be any able pupils in deprived areas, or that girls would be less competent than boys in mathematics or computing and boys less competent in language topics (Scottish Office, 1993).

Therefore, consistent with findings from earlier studies (HMSO, 1989) which had revealed that able pupils in Scotland were under-challenged at school and that they did not develop scientific skills and knowledge at the expected pace in secondary education, the HM Inspectors' report concluded that in most primary and secondary schools, there is "inadequate provision for the needs and interests of able pupils" (Scottish Office, 1993, p.2). With this starting point the report commenced introducing the characteristics of high ability and suggesting how 'able pupils' should be identified and provided. Specifically, as 'able pupils' were identified those who:

> *'[...]performed well across all or most of the curriculum; those who displayed particular abilities and aptitudes in a small group of cognate aspects or subjects; and those who performed particularly well in a single aspect or subject.' (Scottish Office, 1993, p.1)*

It was highlighted though that it should not be assumed that there is "one-to-one correspondence between ability and performance" (Scottish Office, 1993, p.2) and that there are many pupils who, for a variety of reasons, may underachieve. This statement is of great significance as it implies that performance tests and exams are inappropriate for the identification of highly able pupils, since they do not measure potential or 'abilities' but performance. Schools should consider all curricular areas and a wide range of skills for proof of high ability instead of the traditional cognitive areas or the expressive arts, not overlook able pupils with additional educational needs and most importantly, they should take account of a variety of sources, such as parents and peers, in order to evaluate pupils (Scottish Office, 1993).

With regard to classroom provision, numerous suggestions were made in the report. One of the most important was the need to assess "pupils' performance in all aspects of the curriculum" (Scottish Office, 1993, p. 23) before teaching any particular topic in order to determine where their pupils' strengths and weaknesses lie and thus shape their teaching accordingly. The significance of the breadth of the curriculum and the 'appropriateness' of the resources used and strategies adopted was highlighted as well as the impact differentiated teaching in terms of content and assignments has on pupils of all abilities and especially the highly able ones. Finally, the positive outcomes of bringing pupils from different schools together, setting targets and designing

appropriate activities to match with the able pupils' stages of development, were stressed (Scottish Office, 1993).

The significance of this paper lies on many factors. First of all, it was the first national document which focused exclusively on the needs of highly able pupils. Secondly, it stated very bluntly that Scottish schools did not offer sufficient challenge for this category of pupils, thus attempting to raise the awareness of all individuals involved in education. Thirdly, it attempted to respond to teachers' questions and doubts by providing more detailed guidelines regarding the identification of and provision for highly able pupils. Finally, it demonstrated the importance of specific education authorities and school policies regarding the education of these pupils. However, more than a decade later, the situation is most Scottish schools, does not seem to have changed much.

More recent developments: Education (Additional Support for Learning) (Scotland) Act 2004 and 2009- Code of Practice 2005

The Education (Additional Support for Learning) (Scotland) Act 2004 and its amended version in 2009 is one of the latest legislative developments which tied the provision for highly able pupils in the 'additional support needs' arena (Sutherland & Stack, 2012.). As Riddell (2009) underlined, not only did this Act broaden 'the definition of additional support needs to include a wider range of children, but also placed a duty on local authorities to identify and meet the needs of all children requiring additional support' (p.290). The replacement of the term 'Special Educational Needs' with the term 'Additional Support Needs', which was discussed above, was coupled with a redefinition of what constitutes an educational need (Sutherland & Stack, 2014). As it was stated in the Act,

> *'[…]A child or young person has additional support needs for the purposes of this Act where, for whatever reason, the child or young person is, or is likely to be, unable without the provision of additional support to benefit from school education provided or to be provided for the child or young person.*

> *[…] the reference to school education includes, in particular, such education directed to the development of the personality, talents and mental and physical abilities of the child or young person to their fullest potential.' (Scottish Executive, 2004, p.2)*

Although no explicit reference was made in 'able' pupils' needs, these definitions and especially the guideline to develop young persons' abilities and talents to their fullest potential opened the path to a more strategic provision for highly able pupils. And as Sutherland (2011) commented, this Act attempted to "move Scotland away from a deficit driven […] model of support towards a philosophically different and more holistic and socially constructed understanding of support for learning" (p.196).

This tendency to support highly able pupils is more obvious in the 'Supporting Children's Learning: Code of Practice' (2005) which followed the Scottish Act 2004 (Stack & Sutherland, 2014). It was for example explicitly stated that "Children and young people may require additional support for a variety of reasons and may include those who […] are particularly able or talented" (Scottish Executive, 2005, p.11). What is more, it was explained that pupils requiring additional support for learning do not necessarily 'lack ability or skills', but "more able children or young people may require a more challenging education provision than that of their peers" (Scottish Executive, 2005, p.20). To further clarify that, an example of an able primary school child, George, who benefitted from additional support at his school, was given. In that case, the primary school teachers worked in partnership with a secondary teacher in order to provide an appropriate curriculum for him (Scottish Executive, 2005, p.18).

It is noteworthy, that in the Act 2004/2009 and more overtly in the Code of Practice 2005, the critical role of educational authorities for the success of additional support is highlighted. It is remarked quite emphatically that it is the duty of local authorities to cater for pupils with additional support needs and that if they fail to provide for them efficiently then they "could be held to be in breach of a duty" (Scottish Executive, 2005, p.37). It can be thus argued, that these more recent legislations show a more determined commitment to the provision of able pupils' needs on behalf of the Scottish Government.

A last example of the legislative movement towards the inclusion of highly able pupils in Scottish education is the Curriculum for Excellence (Sutherland & Stack, 2012). Naturally, this document does not focus exclusively on the needs of this group, but it is still clear that the direction of education supported is one which allows all children to develop their talents and abilities "to their fullest potential" (Scottish Executive, 2004, p.6). The importance of providing challenges and opportunities tailored to pupils' diverse needs, central to inclusive education and thus the education of able pupils, is stressed throughout the document. It also highlights that a significant amount of pupils do not achieve "all they are capable of" (p.10) and for this reason, the purpose of the curriculum is to enable pupils to "reach the highest possible levels of achievement" by encouraging amongst others "the development of high levels of accomplishment and intellectual skill" and giving "opportunities for children to make appropriate choices to meet their individual interests and needs" (p.10).

The Curriculum of Excellence is more flexible and less prescriptive than previous curricula, because, as it is stressed, it aspires to provide "professional space for teachers and other staff to use in order to meet the varied needs of all children and young people" (Learning and Teaching Scotland, 2009, p.3). Specifically, with regard to curricular levels and national expectations about pupils' progression from the early years education to the end of S3, it is stated that "they do not have ceilings, to enable staff to extend the development of skills, attributes, knowledge and understanding into more challenging areas and higher levels of performance" (Learning and Teaching Scotland, 2009, p.4):

Table 1: Curriculum Levels (Learning And Teaching Scotland, 2009, p.4).

Level	***Stage***
Early	*The pre-school years and P1, or later for some.*
First	*To the end of P4, but earlier or later for some.*
Second	*To the end of P7, but earlier or later for some.*
Third and Fourth	*S1 to S3, but earlier for some. The fourth level broadly equates to Scottish Credit and Qualifications Framework level 4.*
Senior phase	*S4 to S6, and college or other means of study.*

The above, and specifically the phrase “but earlier or later for some” indicate that pupils’ chronological age is not necessarily equivalent to their curriculum level and that some may achieve a level sooner than others (Sutherland, 2011). This is of major importance as it frees highly able pupils from their age stage and enables teachers to use materials “suitable” for higher curricular stages. However, as Sutherland (2011) remarks, although typically pupils can sit national examinations early, schools rarely choose to do so.

Central to the education of highly able pupils is also a flexible curriculum. Indeed an attempt to avoid establishing pre-determined outcomes is evident in the Curriculum for Excellence. Furthermore, considerably improved opportunities for flexible and open ended enquiry are offered, which is exactly what able learners need. However, as Sutherland (2011) comments, this specific feature of the curriculum may “lead to its downfall” (p.201), because it relies greatly on the teacher’s skills and in some occasions may prove too demanding.

The latter, combined with the fact that the curriculum has been very flexible and the national guidelines regarding its implementation have been very broad and general has caused teachers considerable nervousness and uncertainty as to how to carry out its objectives (Priestley & Humes, 2010; Sutherland, 2011). Moreover, the fact that this curriculum was introduced at a period of recession, which resulted in austere economic policies and cuts in the funding of education (BBC, 2011) renders its success even more challenging (Sutherland, 2011). Nevertheless, Curriculum for Excellence aspires to be inclusive and to act as a stimulus for personal achievement, allowing pupils to progress at an appropriate for their aptitudes and needs rate (Scottish Executive, 2004). These objectives, therefore must underpin local authorities and schools’ policies.

To summarise, the Curriculum for Excellence aspires to be inclusive and to act as a stimulus for personal achievement, allowing pupils to progress at an appropriate for their aptitudes and needs rate (Scottish Executive, 2004). These objectives, therefore must underpin local authorities and schools’ policies. However, as Mintz and Wyse (2015) underlined, in addition to the above, teachers need to be better

informed/trained about the various diagnostic categories within the SEN, including highly able pupils, in order to construct appropriate pedagogies for the individual children with SEN, taking into account their personal knowledge of the chid too (e.g. likes, dislikes, personality, difficulties etc.) (Mintz & Wyse, 2015).

SNAP

Along with the policies analysed in the previous paragraphs, the role of the Scottish Network for Able Pupils (SNAP) should be mentioned. This network is situated at the University of Glasgow and works with Enquire -the Scottish Government helpline and website which was created by the Scottish Government to guide parents of and pupils with additional support needs-, providing workshop training for practitioners (Sutherland & Stack, 2014). Moreover, in partnership with five local authorities (LA), SNAP has established a network of 'Associate Tutors', who 'act as a focus for the expansion of staff development, policy and provision at a local level' (Sutherland & Stack, 2014, p.83). The main contribution of SNAP lies in the fact that it not only raises education practitioners' awareness about highly able pupils, but it also contributes to the development of school policies and practice to improve provision for these pupils (Stack & Sutherland, 2014). Moreover they have carried out relevant research in the field and published reports to inform policy and practice in Scotland. For example, in one of their recent reports, Sutherland and Stack (2012) related their findings on how Education Authorities 'identify and provide appropriate learning experience for their highly able pupils' (p.4). They concluded that although results are encouraging, there is still need for everyone involved in education (schools, Education Authorities and the Government) to consider highly able pupils' needs more explicitly.

Key differences and similarities

Despite the fact that the purpose of this study is not to compare provision in England and Scotland but to illuminate education practice in the selected schools, taking into account their respective policy backgrounds, I will now summarise the key policy differences between these jurisdictions, as were presented in the two previous sections.

In England, there have been strong, explicit national policies for the provision of gifted and talented pupils' needs. Despite the fact that the interest towards them is not as strong as it used to be 20 years ago, teachers are still expected to identify up to 10% of their pupils as gifted and talented and develop explicit policies outlining their gifted and talented programmes. They are also expected to develop distinct teaching and learning programmes to address their needs. Moreover, Inspectors still monitor schools' effectiveness in catering for these pupils and the IQS and CQS self-evaluation guidelines are available to help teachers improve their provision.

In Scotland, requirements are not that detailed and explicit. No specific national policy, other than the 1993 HMI Report has focused exclusively on 'more able' pupils' needs. Nevertheless, as it was argued above, provision for this group is part of the inclusive agenda of the 'Additional Support for Learning' policy and schools are expected to assess all their pupils' strengths and weaknesses in order to differentiate accordingly (Sutherland & Stack, 2012.). Moreover the CfE does not bind teachers 'by age and stage' (Sutherland, 2011) and instead takes into account the possibility that pupils can reach a level earlier than most of their chronological age peers. Finally SNAP has produced several publications to guide teachers how to meet those pupils' needs and has also undertaken the task of raising teachers' awareness about these pupils through seminars.

Based on the above, given that England has had a stronger history of national interest and policies for the provision for gifted and talented pupils it would be expected, that teachers in England are well informed about these pupils' needs and make sure that they take the necessary steps to cater for them, by developing relevant policies and implementing them. Teachers in Scotland, despite there having not been a strong national interest towards gifted and talented pupils exclusively, but rather as part of the ASN group, should be expected to be aware of their characteristics and of the main principles to ensure that they are catered for, since there have been several publications, local authority guidelines and seminars available to better inform teachers' decisions.

To conclude, the fact that there are relatively few studies examining educational provision for gifted and talented pupils in either England or Scotland' primary schools, makes the description of practice in either of these jurisdictions a rather taxing task. What is more, a study exploring relevant practice in both English and Scottish schools has not yet been undertaken, which is one of the main reasons why I decided to embark on this research journey. Having therefore by now portrayed the background of this study, I will set out to explain my methodology in the following chapter.

Chapter 5 **Methodology**

5.1 Introduction

In the previous chapters I examined the most influential debates about the terminology, identification and provision in gifted and talented education. Subsequently, I described some European and international policies regarding gifted and talented pupils and then focused on relevant policy developments in England and Scotland. The purpose of this chapter is to determine the main aim of this study and the specific research questions, to illuminate the philosophical, ontological and epistemological foundation which underpins this research and informs the decisions on methodology and methods, to describe the adopted research design and explicate the procedures of participant selection, data collection and analysis, highlighting the correspondence of such decisions to my theoretical orientation, explain the way my data were analysed and discuss issues of validity and reliability, reflexivity and ethical considerations (Silverman, 2000).

5.2 Aim- Research Questions

The main aim of this study was to investigate in depth how selected primary schools in England and Scotland have approached the development of policy and practice for the educational provision of gifted and talented pupils, taking into account the differences in the national policy background as were presented in the previous chapter. However, the objective of my study was not to compare England with Scotland and draw conclusions about these jurisdictions as a whole. What I aspired to do was to include as diverse schools as possible (see Chapter 5.4) in order to illuminate my topic from different angles, and these two jurisdictions with their shared history and yet distinct approaches to education could serve my purpose.

Having at first identified and examined the most influential gifted and talented policies and practices in England and Scotland as my area of interest in rather general terms in order to decide the focus of my study, I set out to determine the more specific research questions in an informed but unbiased manner which would allow in-depth

exploration of the phenomenon under study. To be more specific, my research questions are the following:

1. How do primary practitioners conceptualise gifted and talented pupils and how do they distinguish them from others?

2. How do they consider their role in the identification and provision for these pupils?

3. How do primary practitioners interpret, restructure and apply national or school policy on gifted and talented pupils within these jurisdictions?

4. Whether they face any challenges in applying 'gifted and talented' policies and what steps they take to overcome them?

5.3 Theoretical orientation

The methodology which was considered suitable to approach the research aim and questions is Case Study. Before explaining in detail the reasons which render this methodology suitable for my study I will briefly address the theoretical assumptions, which underpin and inform the methodological decisions and the research design (Crotty, 1998). Specifically, as Newby (2010) highlights, it is these assumptions which influence "what is researched and how it is interpreted" (p.33). For this reason, I will first endeavour to explicate the underlying philosophy and then the ontological and epistemological assumptions which influenced my methodological decisions.

As Pring (2014) warns, a specific paradigm was not adopted a priori. Rather, the purpose and nature of this study, which drove my research, were further clarified by reflecting on the relevant paradigms (Cohen, Manion & Morrison, 2018). In this study the main principles of the 'critical realist' paradigm have been embraced. Most of critical realism's central tenets arose from Roy Bhaskar's work (e.g. Bhaskar, 1975). As Archer and her colleagues (2016) explained, critical realism 'is not an empirical programme; it is not a methodology; […]. It is rather, a meta-theoretical position: a reflexive philosophical stance concerned with providing a philosophically informed

account of science and social science which can in turn inform our empirical investigations' (Archer, Decoteau, Gorski, Little, Porpora, Rutzou, Smith, Steimetz and Vandenberghe, 2016 p. 1-2). As Proctor (1998) underlined, critical realism arose to great extent as 'an explicit rejection of positivism and its empiricist philosophy, especially as applied in the social sciences' (p.360). It is called 'critical', firstly because it admits that any attempt to describe and explain the world will inevitably be fallible, and secondly because the ways the world is ordered and categorised are always open to critique and can be reviewed and replaced by new relationships and categories (Scott, 2005). As Cruickshank (2002) further explained, '[c]ritical philosophy is therefore critical because it accepts neither the view that there are fixed philosophical first principles which guarantee epistemic certainty, nor the idea that first-order activities are self-justifying. Instead, it steps back from first-order activities, posing second-order questions concerning the condition of possibility of science and knowledge, and seeking answers by engaging in a critique of the existing terms of reference that purport to explain a first-order activity' (p.55).

Having briefly defined the philosophical paradigm which drove my research, I will now discuss some of the ontological theories which underpin this study. Ontology, according to Bhaskar (2014) is 'the philosophical study of being' (p.23). As Archer and her colleagues (2016) eloquently pointed out, '[a]t the heart of critical realism is realism about ontology—an inquiry into the nature of things.' (p.2). Specifically, critical realists believe that although great part of reality exists independently of our knowledge of it, it 'does not wholly answer to empirical surveying or hermeneutical examination' (ibid., p.2). Thus researchers need to recognise that science is a social process which explores a world which acts and exists independently of it (Bhaskar, 2014). In fact as Bhaskar (2014) highlighted, many social researchers accept with readiness that our knowledge of the world is socially constructed and changeable. The distinctive feature of critical realists however is that despite this, 'things and structures […] are existentially quite independent of us and our knowledge, and relatively or absolutely independent causally' (p.25).

The epistemological foundation, from which a researcher works, is highly influenced by the ontological, and in turn the methodology followed in a study is affected by the researcher's epistemology (Annels, 1996). Epistemology is the study

of truth, knowledge and justification (Proctor, 1998). Critical realists as it was mentioned above, believe in the existence of a reality that is independent of us, the observers. However, they believe that reality cannot be readily accessed, but that it socially constructed. Researchers in their attempt to understand and interpret what they observe, create complex stories. As Easton (2010) argued, these interpretations rely on several assumptions which, one with another, 'create a system of thinking about the world that we find acceptable' but it can change again and again following different observations. However, according to Willig (2008), this does not necessarily mean that we can never really know anything; instead, it proposes that there is not a single 'knowledge', but various ones. Thus, as Bhaskar (2014) underlined, 'although our knowledge is fallible and without sure foundations and is always knowledge under particular socially and linguistically mediated descriptions, nevertheless there can be rational grounds for preferring one to another competing description (belief or theory) (p.26). This means that the participants and the researchers' values, priorities and experiences affect the ways theories evolve (Cohen et al., 2018). In social sciences in particular, where there is a large array of conflicting and contested theories/interpretations of the phenomena observed, the aim of critical realist philosophy is to transform these theories appropriately by better understanding all the agents involved (self as well as research objects). Therefore, as Bhaskar (2014) stressed 'the most general goal of critical realist philosophy is enhanced reflexivity or transformed practice (or both)' (p.4) (see section 5.9 for more on reflexivity).

Case Study

The methodology which was considered most suitable to address my research questions is a qualitative case study. Case study research is one of the methodologies which corresponds well with critical realism (Easton, 2010). In fact critical realism justifies the study of cases, regardless of the number of units included, provided that the process involves thoughtful in depth research with the ultimate objective of understanding causalities behind the phenomena observed (ibid.). The main weakness of case study research is its very low representativeness while its principal strength is that even the study of a single case offers the opportunity to understand a phenomenon

comprehensively and in depth (Easton, 2010). In this section I will give some description of what a Case Study is, what its main principles are and how it contributed in meeting the specific aims of my research.

Firstly, I would like to note that the term 'qualitative' case study may appear a pleonasm, when in fact it is not. There have been case studies following a quantitative or mixed methods approach (experiments, surveys, historical research etc.) and this is why the terms need to be differentiated (Cohen et al., 2018). A qualitative case study shares some common characteristics with other types of qualitative research; it is inductive and the researcher is the main facilitator of data collection and analysis (Merriam, 2009). Moreover, it is suited to answer 'how' and 'why' questions, because as Yin (2003) explained, 'such questions deal with operational links needing to be tracked over time, rather than mere frequency or incidence' (p.6). Several definitions have been offered to describe what a case study is (Hamilton & Corbett-Whittier, 2013) and this is why it has been described as a 'contested terrain' (Yazan, 2015, p.134).

Merriam (2009) defined as case study the intensive investigation of a 'bounded system'. A 'bounded system' is *what* a researcher studies, 'a single entity, a unit around which there are boundaries' (p.40). As she further argued, within a 'bounded system' 'I can "fence in" what I am going to study. The case then, could be a single person who is a case example of some phenomenon, a program, a group, an institution, a community, or a specific policy (Merriam, 2009, p.40). What I found most helpful was Cresswell's (2007) lengthy definition as cited by Merriam (2009, p.43):

> *'case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in - depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case description and case - based themes' (2007, p. 73, emphasis in original).*

For the purposes of my research I decided to do a 'multicase' study. According to Merriam (2009) a multicase study -or according to other authors a 'cross-case' (Yin, 1981; Seawright & Gerring, 2008) or 'collective case study' (Zainal, 2007)- entails the

collection and analysis of data from several cases and can have subcases embedded within each case. For example a case could be a specific school and its subcases, particular classes or teachers within it. All the cases however, as Stake (2013) highlighted need to be at least in some ways similar. Therefore all single cases are 'of interest because [they] belong to a particular collection of cases' and they are 'somehow categorically bound together' (p.6). Doing a multi-case rather than a single case study enabled me to carry out both 'within-case' and 'cross-case' analysis. 'Within-case analysis' enabled me to avoid the danger of considering only gifted and talented pupils in relation to each other, but to consider them as individual pupils in a classroom consisting of pupils with different abilities, strengths and needs (Walter, 2007). 'Cross-case' analysis took place later in the research process and enabled me to investigate any emerging themes, dissimilarities or patterns and unearth any possible causalities behind them (Wynn & Williams, 2012).

Given the nature of my research aims and questions and the characteristics of a case study methodology, this was considered the best plan to meet the purpose of my study. The complex issue of how teachers interpret relevant policies and make decisions on how to provide for gifted and talented pupils needed an in-depth investigation of classroom behaviours and teacher opinions in the context of the primary school and class the teachers worked, taking into account multiple variables such as the specific (national/school/Local Authority) policies available to inform teachers' decisions, the specific classroom population teachers have to work with or the specific challenges they face in their daily routine, the existence of any particular supportive mechanisms, programmes or resources and so forth. The fact that a case study methodology is 'anchored in real - life situations' (Merriam, 2009, p.51) allows for a rich description of the phenomenon studied, offering insights and illuminating meanings participants apply to the phenomena under investigation, advancing thus 'a field's knowledge base' (Merriam, 2009, p.51). The main critique against the use of a case study methodology has been that it cannot study a representative sample of the population and is therefore unable to draw generalisations which would be particularly useful in understanding 'what' the broader picture is (Easton, 2010). However, as Merriam (2009) underlined, 'this argument against case study research misses the

point of doing this type of research' (p.52). It is its ability to create a vivid description of a particular case (Connolly, 1998), taking into account multiple perspectives and embracing differences instead of attempting to simplify them, rather than its potential to determine the degree to which specific findings can apply to a broader population that renders it valuable for this study (Walters, 2007; Merriam, 2009).

Before concluding this chapter I will endeavour to determine the differences between 'case study' and 'ethnography' and explain the reasons why the first methodology was preferred. The reason why this distinction will be drawn is that there is much confusion around the two methodologies (e.g. Yin, 2013) and that it is often hard to understand how authors differentiate them (Walters, 2007). Indeed some authors have used these terms interchangeably to refer to the same research process. I found Creswell and Poth's (2017) distinction particularly enlightening. Indeed, as they argued, the main differences between the two methodologies lie on the aims and the foci of the study. Specifically, the aim in ethnography is to describe and interpret 'a culture-sharing group' (p.78) by focusing on the shared patterns. In case studies however, the aim is to illustrate a programme, activity or event (e.g. teachers' approach to gifted and talented education), through an in-depth description and analysis of the case(s) (Creswell, 2007). Thus, as Walters (2007) concluded, ethnography aims to provide a holistic view of a culture, while case study focuses 'on the case situated within a context' (p.93). Therefore, as my intention was not to study and describe a specific school culture and its educational processes holistically but rather to understand how teachers within different schools approached the specific issue of the education of gifted and talented pupils in the context of relevant school or national policies, I decided to do a multi-case study.

To conclude, regardless of the definition of a 'case study' or 'multicase study' a researcher espouses, as Cohen and his colleagues underlined (Cohen et al., 2018) it is important that they clarify what the 'boundary system' is, or in other words 'what constitutes the *case*' (p.376). Therefore, in the next section I will describe what my cases were, what criteria I used to select them, how I approached them and gained access and how participants within my cases were chosen.

5.4 Sample Selection

My aim in selecting the specific cases to be studied was to achieve variation on relevant dimensions and thus manage to investigate my topic through different angles. However, choosing good cases for very small samples, is quite a challenging endeavour (Seawright & Gerring, 2008). I aspired to investigate state primary (or junior) schools in England and Scotland which have taken strong initiatives to provide for the needs of gifted and talented learners, but also schools which did not prioritise those pupils' needs so highly. Moreover, it was my intention to include both schools from affluent and poor areas to see if there were any remarkable differences in their approach to gifted education. Finally, I was interested in including a private school in my case studies. The reasons for this were the following: 1. independent schools do not have to follow the National Curriculum or the Curriculum for Excellence, they can therefore have more flexibility in shaping their curricula based on their pupils' needs or their school's ethos, 2. most select their pupils with academic criteria in order to ensure high levels of attainment in exams and attract more parents (West, 2010), 3. attainment in independent schools is usually higher than in most state schools (Perry & McConney, 2010).

In order to meet the sampling criteria I described above, I decided to use 'purposive sampling' (otherwise labelled 'purposeful' or 'criterion-based' sampling). In this type of sampling, cases or participants are selected based on specific criteria which will enable the researcher to investigate in depth and detail the central themes which consist the focus of his/her study (Cohen et al., 2018). As Patton (2002) emphasised, 'the logic and power of purposeful sampling lies in selecting *information - rich* cases for study in depth. Information - rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry, thus the term *purposeful* sampling' (p. 230). In purposive sampling decisions are informed not only by the aims of the study, but also by existing knowledge or gaps in the relevant literature (Ritchie, Lewis & Elam, 2003). For example, my aim to focus on primary schools was determined by the fact that there is a very limited number of studies of gifted and talented education in England and Scotland which have focused on this educational level (Bailey, Pearce, Winstanley, Sutherland, Smith, Stack & Dickenson,

2008). Moreover, the fact that success in exams (and often high ability) has frequently been associated with socio-economic status drew my attention to the study of cases from both privileged and more deprived areas (Caldas & Bankston, 1997; Coleman et al., 1966). Nevertheless, as Ritchie and her colleagues (2003) argued, 'although 'purposive' selection involves quite deliberate choices, this should not suggest any bias in the nature of the choices made. The process of purposive sampling requires clear objectivity so that the sample stands up to independent scrutiny. So although the researcher or funders may well have hypotheses they want to test, the opportunity for these to be proved or disproved needs to be equal' (Ritchie et al., 2003, p.80).

A number of writers have identified several types of purposive sample (see Table 2 below), such as: typical case sampling, homogeneous, sampling of unique cases, opportunistic sampling, complete collection and snowball sampling (Teddlie & Yu, 2007). For the purposes of my study as they were described in the previous paragraphs I decided to use a combination of two types of purposive sampling: the 'extreme' or 'deviant case sampling' and the 'reputational case sampling'. The reasoning behind the use of the former is that by choosing special or contrasting cases and comparing them with one another, more aspects of the studied phenomena are illuminated (Cohen et al., 2018; Ritchie et al., 2003; Teddlie & Yu, 2007). In the 'reputational case sampling' cases are selected on the recommendation of key informants (Cohen et al., 2018). In my study for example, I asked specific Local (Educational) Authorities officers to indicate specific schools in their jurisdiction which met the criteria I proposed.

Table 2: Typologies of purposive sampling (Teddlie & Yu, 2007, p.81)

Sampling to Achieve Representativeness or Comparability	**Sampling Special or Unique Cases**	**Sequential Sampling**	**Sampling Using Combinations of Purposive Techniques**
Typical Case Sampling	Revelatory Case Sampling	Theoretical sampling	
Extreme or Deviant Case Sampling	Critical Case Sampling	Confirming and Disconfirming Cases	
Intensity Sampling	Sampling Politically Important Cases	Opportunistic Sampling	
Maximum Variation Sampling	Complete Collection (or Criterion Sampling)	Snowball Sampling	
Homogeneous Sampling			
Reputational Case Sampling			

Specifically, after an initial review of the literature, where I tried to identify the policy landscape for gifted and talented education in England and Scotland, I searched all English and Scottish Local Education Authorities (LEA) and Local Authorities' (LA) web pages. This gave me an idea of which areas have developed specific policies to address the needs of gifted and talented pupils, or 'more able pupils' explicitly or within their ASN/ASL policies and which LEAs still have an appointed Gifted and Talented Coordinator. My second step was to e-mail one educational officer from each authority (152 in England and 32 in Scotland) to ask them to suggest one school which has taken strong initiative toward the provision of these pupils' needs and one which

has encountered particular challenges with implementing gifted and talented policies. Unfortunately, I had a small amount of responses to my initial e-mail. Following my second and third attempt to communicate with education officers, I managed to get a few more answers.

Most officers in England replied that since the former Gifted and Talented Coordinators resigned, they were never replaced and attempts to address the policy for gifted and talented at Local Level have been dropped. They moreover explained that now policy development and provision for the gifted and talented pupils relies on schools. Despite my subsequent endeavours to persuade them to suggest specific schools, most responded that either schools were very busy at the time or that they were not in a position to tell which schools met the criteria I set. Only one LEA officer agreed to suggest a few schools which might be willing to participate in my study. After looking into the web-pages of the recommended schools for information about provision for gifted and talented pupils with little success, I decided to look into different information which would potentially enable me to choose the 'right' cases for my study. For example, I looked into the percentages of pupils eligible for Free School Meals (FSM), their Ofsted Inspection Reports and their performance tables for Key Stage 2. The information on the amounts of pupils eligible for FSM was considered valuable to give me an idea of whether the schools had low or high amounts of pupils from low socioeconomic backgrounds. Poverty has been frequently associated with low performance at school. For example, the Department for Education reported that there is a gap of 16 percentage points in the educational attainment of pupils entitled to FSM compared to those who are not (DfE, 2014). Therefore, I decided that selecting schools with low amounts of pupils registered for FSM would most likely lead me to schools with comparatively higher achieving pupils. These pupils could work as a surrogate for gifted and talented at the early stages of my study, as there was no clear information about gifted and talented pupils' percentages on the schools' webpages or on my initial communication with the schools' head teachers. I acquired similar information, about the performance of the recommended schools in SATs from the performance tables reported by the Department for Education. Finally, Inspection Reports gave me an idea of the school's

effectiveness in meeting the needs of gifted and talented pupils, as perceived by Ofsted Inspectors.

To be specific, the schools from England that agreed to be case-studied, although not situated in affluent areas, had rather low amounts of pupils registered for FSM (see Table 3 below). I would have been very interested to include schools with higher amounts of financially disadvantaged pupils, to collect richer and more divergent data and draw comparisons between schools from different economic strata, but all the schools with this description that I got in touch with refused to participate in my study, arguing that they do not have any gifted and talented pupils. This is interesting in itself because, as it was mentioned in Chapter 1.3 it indicates that children from poor socioeconomic backgrounds are less likely to be identified as gifted and talented than those coming from middle class families (Eyre, 2009). Moreover, both of the schools included in my sample were above the national standards for numeracy and literacy according to their SATs results. Finally they had recently been evaluated about their effectiveness to cater for gifted and talented pupils amongst others, by Ofsted Inspectors. More details about each of the schools included in my study is given in Chapter 6.

In Scotland however, none of the few responses I finally got to my e-mails provided me with any specific recommendations. My next step was to identify ideal schools which would meet my criteria (see the beginning of this section) and contact them in order to explain the aims of my study and ask them to allow me to study them. When I got negative responses from all chosen schools, I resolved to e-mail every school (88 in total) in the City of Edinburgh Council. The City of Edinburgh was chosen for three reasons. First, because it is one of the biggest areas in Scotland, and it would therefore be more likely for me to find schools eager to participate in my study. Secondly, because it was one of the few councils which had published an explicit policy for the education of gifted and talented pupils (‘A Framework for Gifted and Talented Pupils’, 2001), although this is no longer in use. And thirdly, as Edinburgh is my residence city, I would be more flexible to conform to schools’ schedules, keeping at the same time my research costs low.

Specifically, of the 88 schools in Edinburgh only five responded positively to my emails. Most head teachers argued their staff was extremely busy and despite having an interest in my study they could not ask them to get involved in it. Despite the difficulties, I finally managed to include schools with divergent characteristics with the aim to get as rich data as possible. One of the schools chosen was quite big, had relatively high amounts of pupils registered for FSM and rather high amounts of pupils with English as a Second Language (see Table 3). This information indicated possible difficulties teachers might face in their day-to-day practice. The other school in contrast, was much smaller, with very low amounts of pupils registered for FSM and low amounts of pupils identified as ASL. Although there was no information with regard to more able pupils on either of the schools' webpages, either explicitly or as part of their ASL, both head teachers agreed to participate in my study because, as they declared, they had an interest in the subject.

Finally, in order to ensure as much variation as possible in my cases, I decided to include a school with a different philosophy and education style to that of most mainstream schools, namely, a Steiner-Waldorf school. The Steiner educational philosophy is child-centred: one of its main principles is that it is against the 'one-sided emphasis on the intellect' (Uhrmacher, 1995, p.392) and proposes instead fostering the total personality by integrating and developing practical, artistic and intellectual skills. Central to this philosophy is also the cultivation of children's creativity and imagination (Uhrmacher, 1995) with a strong emphasis on arts (music, drama and art) (Woods, Ashley & Woods, 2005). I was thus interested in exploring teachers' beliefs and attitudes towards their more able or gifted and talented learners in this different educational context. Another distinguishing characteristic of Steiner schools is that they are self-governed and thus not directed by a head teacher (Randoll & Peters, 2015). Instead, administrative leadership is shared by several groups such as the college of teachers or the board of trustees (Easton, 1997). Therefore after initially contacting some of the Steiner schools in the UK, the respective colleges of teachers met and discussed my invitation and some agreed to participate. One of these schools, despite their decision to participate in my study, expressed their reserves regarding the topic of gifted and talented education, pointing out amongst others that their school

does not agree with the categorisation and characterisation of pupils by abilities. Since most of the schools in my sample that far showed a positive interest in my topic, I decided to include this case, in order to maximise the diversity of my cases and investigate a different viewpoint. Although commuting to this schools was difficult and time-consuming, the exceptionality of this case was particularly valuable to my study. There are currently 35 Steiner-Waldorf schools in the UK and Ireland (www.steinerwaldorf.org) and given that all of them share the same philosophy and similar curricula, it was not very hard for me to protect its identity. Any ethical implications relating to this will be discussed in Chapter 5.8. I have chosen the pseudonym 'Da Vinci's School' which will be used hereafter. More details about the philosophy and particular characteristics of this school will be given in Chapter 6.

The long process of purposive sampling described in the previous paragraphs resulted in the selection of the following schools, each of which has been given a pseudonym:

Table 3: Case studied schools

St Hermylus's RC (School 1)	Scottish Catholic school in a large urban area. Approximately 300 pupils enrolled, 17% registered for FSM and an approximate amount of 70% achieve the expected level in literacy and numeracy at the end of P7. Very large amount of pupils speaking English as a second language
Macbeth Primary (School 2)	Scottish state-funded school in an accessible rural area. Approximately 150 pupils enrolled, 5% registered for FSM and an approximate amount of 70% achieve the expected level in literacy and numeracy at the end of P7.
St Achillas's RC (School 3)	English Catholic School in a small urban district. Approximately 250 pupils enrolled, 10% eligible for FSM, 70% meeting the expected standards in literacy and numeracy, rated as Outstanding by Ofsted
St Giovanni's RC (School 4)	English Catholic School in a medium sized urban district. Approximately 200 pupils enrolled, 7% eligible for FSM, 70% meeting the expected standards in literacy and numeracy, rated as Outstanding by Ofsted
Da Vinci's School (School 5)	Small independent school. None of the pupils registered for FSM, 100% achieving a pass rate (Grade A-C) in Highers, selection of pupils with informal interview.

Each school will be described in greater detail in the following chapter.

In most case studies, the whole subculture of the researched group (school) is included. In this case, my aim was to focus on specific individuals, who could act as key informants, enabling me to gain greater access to the studied population and who would be in better position to reflect upon and share with me the school's practices on

gifted and talented education (Roper & Shapira, 2000; Higginbottom, 2004). Case studies usually need two levels of sampling; first, cases are selected and then the specific people, activities or documents to be studied within each case need to be chosen (Creswell, 2007). Thus following the selection of my cases, I needed to select the specific teachers to be observed. In order to achieve this, I asked head teachers to indicate at least two specific teachers who might be interested to participate in my study. At the same time, however, I observed the broader school population, and depending on the agreed access I interacted with as many members of staff as possible (learning assistants, teaching assistants, other teachers etc.). Usually, after a couple of visits in a school, when a more informal relationship between me and the teachers was established, I managed to approach more teachers who predominantly agreed to be included in my sample. In most schools however, I focused on a small number of classes (usually 4-5) in order to get an in-depth understanding of their routines and processes and avoid getting overwhelmed by the individual cases. A more detailed reference of the time I spent studying each case, the number of classes I observed and the people I interviewed will be made in the next chapter.

5.5 Data Collection

One of the core characteristics of a case study methodology is its preference for multiple methods of data collection (Yazan, 2015). For example, some of the methods for data collection suggested by Yin (2009) are: interviews, observations, (analysis of) documents, physical artefacts and archival records (Cohen et al., 2018). As Willig (2008) argued, 'since case studies concern themselves with the complex relationship between the contextual and temporal dimensions of an event or phenomenon, it is unlikely that the use of a single research method would generate data that do justice to this complexity' (p.80). The integration of information from various sources, which has been described as triangulation, enables the researcher to gain a deeper understanding of the phenomenon investigated, by facilitating 'an appreciation of the various dimensions of the case as well as its embeddedness within its various […] contexts' (Willig, 2008, p.75). Thus the use of several procedures for the data collection enables the researcher to discover variations and confirm emerging theories (Dey, 1999). In my case studies I decided to use interviews, observations and

documents as my main data collection tools and compare them with my research diaries' entries. In the following sections I will describe each method, the reasons why they were chosen and the ways I employed them.

5.5.1 Interviews

Interviews, according to Patton (2002), give researchers access to interviewees' beliefs, feelings, intentions or behaviours that have taken place in the past and cannot be replicated. Thus the purpose of interviewing, according to Patton (2002), 'is to allow us to enter into the other person's perspective' (p.341). What is more, an interview is a flexible data collection tool, which enables the use of multi-sensory channels: non-verbal and verbal, seen or heard. It is also a powerful tool for researchers who are interested not only in what people's opinions are, but most importantly, in how and why they have framed these opinions the ways they have and how and why they connect these opinions with their behaviours (Cohen et al., 2018). On the other hand, interviews are time consuming both for the researcher and, primarily, for the participants. Anonymity may sometimes be risked and researcher bias may influence the outcome of an interview (ibid.). Indeed, this data collection method's major strength of allowing the co-construction of knowledge between researcher and informant is one of its weaknesses too, as it is not context-free and is very much influenced by the way questions are shaped and consequently, researcher's expectations (Charmaz, 2004). Nevertheless, as Mills et al. (2005) maintain, provided that researchers are aware of their assumptions and careful about the ways they shape their questions, interviews may 'provide the site for active interactions between two people leading to results that are both mutually negotiated and contextual' (p.9). Finally, as Cohen et al. (2018) argued, an interview is a planned and well-constructed event 'rather than a naturally occurring situation, and this renders it different from an everyday conversation; the researcher, therefore, has an obligation to set up, and abide by, the 'rules of the game' in an interview' (p.507).

Several types of interviews have been proposed by writers (e.g. Lincoln & Guba, 1985; Patton, 2002). Guba and Lincoln (1985) summarised these typologies as based on: 1. 'their degree of structure', 2. 'their degree of overtness' (i.e. whether participants are aware or unaware that they are being interviewed) and 3. 'the quality

of the relationship between interviewer and respondent' (e.g. hostile relationship or 'as peers') (p.268). The most common typology is the first. According to this, an interview can be structured, semi-structured or unstructured. In the first case, the exact wording and order of questions is predetermined and researchers has very limited freedom to make changes, unless specified in advance (Cohen et al., 2018). The unstructured interview on the other hand is the exact opposite: it is very flexible and consists of open-ended questions only which are not pre-determined. It looks more like a conversation rather than an interview and is mainly used as an initial-interview, to give researchers the opportunity to learn more about the phenomena studied and shape a following (more structured) interview accordingly (Merriam, 2009). In the semi-structured interview, which is very popular with social researchers, questions are flexibly structured and open-ended, allowing researchers to tailor questions, probes and prompts to each respondent according to their answers and behaviours (Cohen at al., 2018). The interviewer has composed an interview plan with the issues that need to be covered in advance but decides the wording and the sequence during the interview. The use of open-ended questions enables researchers to go in more depth to any of the topics discussed if they so wish, to clear up possible misunderstandings and by producing unexpected answers can open new possibilities to the phenomena studied (Cohen et al., 2018). However, as Patton (1980) warned, the flexibility of this method reduces the degree to which comparisons between responses can be drawn and it is even possible that important topics 'may be inadvertently omitted' (in Cohen et al., 2018, p.510) and possible, or even likely, that the interviewer can bias the results and thus make comparisons between responses invalid. Nevertheless, as Merriam (2009) noted, 'this format allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic' (p.90). For these reasons, I decided to conduct one-to-one, semi-structured interviews with my participants.

Before my arrival at the first school, I had prepared an interview schedule consisting of the broad topics I wanted to address during my interviews and some indicative questions in order to approach each topic. My interview plan was shaped and reshaped many times throughout the time I spent case studying schools, depending

on the issues that arose in each school and the answers teachers gave me during the interviews. I made sure to listen to previous recorded interviews before conducting a new one in order to identify possible weaknesses or omissions. What is more, after creating my first interview schedule I conducted a pilot interview with a fellow PhD candidate with long working experience as a teacher in primary schools in Scotland. As several authors have pointed out (e.g. Yin, 2003; Creswell, 2007; Merriam, 2009), pilot interviews are crucial, because they enable researchers to trying out their questions. They can thus get both practice in the art of interviewing, but also determine which questions are confusing, which ones yield useless data and which should have been included in the first place. For example, one of the questions I decided to include in my interview plan following the pilot interview concerned the 'challenges' teachers faced in their day-to-day practice. As my colleague pointed out, 'you may have the best intentions towards catering for your most able pupils, but at the end of the day you have to prioritise. There are too many things a teacher is expected to do'. Indeed, as I will further elaborate in my findings section, teachers often referred to these challenges which hindered provision for gifted and talented pupils and showing an understanding of this by addressing it in my questions made teachers 'open-up' to me more readily. Apart from these, the pilot interview enabled me to try my conversational skills in a formal setting and boosted my confidence, which was particularly helpful to me since English is not my first language. The topics addressed in most of my interviews were the following:

1. The terminology used to describe gifted and talented pupils
2. Teachers' beliefs about these pupils' characteristics
3. Beliefs about the nature of ability
4. Awareness of school/LA/national policies to address gifted and talented pupils' needs
5. Identification procedures
6. Strategies to meet their educational needs

7. Classroom arrangements (type chosen, purpose/reasoning, presumed effectiveness in terms of…)

8. Challenges faced in the provision for gifted and talented pupils

5.5.2 Observations

Observations along with interviews are one of the most useful research tools in qualitative research. The characteristics which render them unique instruments, compared to interviews is first that they occur in the natural settings where phenomena of interest take place (e.g. classrooms) and second, 'observational data represent a first-hand encounter with the phenomenon of interest rather than a second-hand account of the world obtained in an interview' (p.117). However, in order for observations to be a reliable data collection tool, researchers need to be skilled and systematic. As Patton (2002) underlined, researchers need to collect data in a rigorous manner. In other words, they need to pay attention to everything, write field notes descriptively and distinguish between important details and minutiae (ibid.).

In this paragraph I will explain the reasons why I decided to use this method to collect data. First of all, I wanted to familiarise myself with the school/classroom context and get an opportunity to note specific interesting incidents or behaviours to be later addressed in the interviews. Secondly, being an outsider, I was aware that observations would enable me to observe routines or other habitual practices and question their purpose, while teachers accustomed to employing them may take them for granted and therefore not report them in an interview. What is more, I was aware that observations could give me 'first-hand' information which I could then compare with teachers' removed accounts in an interview (Merriam, 2009). In addition, I had realised through my previous research experience that teachers often find it hard to discuss about 'sensitive' topics such as pupils' abilities. Discussing instead about such issues through incidents that have been observed in class may appease/mitigate teachers' hesitations. Furthermore, embarking on a conversation (or interview in this case) with a person one has been already acquainted with, facilitates the flow of the discussion. Finally, as it was mentioned earlier in this chapter, the use of observations

along with interviews (and other data collection methods), enables the triangulation of emergent findings (Wynn & Williams, 2012).

The structure of my observations was rather flexible for similar reasons as those mentioned in the adoption of a semi-structured interview technique. I was aware of the things that I wanted to keep a note of, but strived to ensure that I observed situations in as open-minded a way as possible in order to avoid 'missing' important data. Being a primary school teacher myself, enabled me to familiarise myself with classroom environments and routines almost immediately. In line with relevant suggestions from prominent qualitative researchers (e.g. Cohen et al., 2018; Merriam, 2009; Patton, 2002) the list of things I planned to observe where the following: 1. The classroom setting (seating arrangements, resources on the walls etc.), 2. The participants (number of teachers and pupils in each class, characteristics of participants and their roles, patterns and established routines that govern their behaviour, 3. Activities teachers and pupils engage in (how long they last, what they entail, what impact they have on pupil-teacher and peer interactions), 4. Specific conversations (taking place between peers, teachers and pupils or even those occurring between pupils and the researcher, reporting direct quotations), 5. More subtle aspects (such as nonverbal behaviours or things that were expected to happen and did not) and 6. My own behaviour (what my role in the class was, how I interacted with participants, how my behaviour in class affected my observations or field notes and my thoughts on the observed events) (Patton, 2002; Merriam, 2009).

The possible roles a researcher may assume during an observation have been classified by Gold (1958) as:

1. The complete participant: the researcher is a member of the group studied, but conceals his or her role as an observer to avoid disrupting the natural occurrence of events. The ethics of this role are highly questionable (Cohen et al., 2018).

2. Participant as observer: similar to the first role, but the researcher reveals her/his role as an observer. As Merriam (2009) pointed out, 'the trade - off here

is between the depth of the information revealed to the researcher and the level of confidentiality promised to the group in order to obtain this information' (p.124)

3. Observer as participant: Researchers' role is overt to all members of the group. They participate in the group's (classroom's) activities, but their primary role is the gathering of information (Cohen et al., 2018). This method, gives researchers access to a larger number of people and enables them to collect richer data. As Adler and Adler (1998) explained, researchers assuming this role 'observe and interact closely enough with members to establish an insider's identity without participating in those activities constituting the core of group membership' (in Merriam, 2009, p.124-125).

4. Complete observer: the observer is absolutely detached from the group and is (usually) unnoticed by those observed (e.g. in a crowded location). (Cohen et al., 2018, p. 543).

Throughout my observations I assumed the role of the 'observer as participant'. My involvement in most of the schools' routines, enabled me to get to know all teachers and support staff in each school as well as most of the pupils observed. Thus, I collected very rich data deriving from various sources. I should also notice here, that being Greek, I was able to observe things that might have been taken for granted by a familiar researcher. More details about my role as observer within each case will be given at the end of this chapter.

5.5.3 Documents

Documents are another source of data, qualitatively different from interviews and observations in that they have (usually) been created for purposes irrelevant to the research and do not depend on participants' willingness to cooperate in a researcher's demands (Merriam, 2009). The examination of most types of documents is unobtrusive and does not risk breaching anonymity or confidentiality. Moreover, the analysis of documents, can serve as an alternative way to obtain access to behaviours and opinions of people who have not been included in the (active) participants of a study (Cohen et

al., 2018). According to Ritchie's (2003) definition, 'document' is an umbrella term referring to various materials- written, digital, visual or physical- which somehow relate to the study at hand.

One of the principal types of documents are public records, namely a society's official records of activities. These can be records of births and marriages or government documents, national examination results and school reports (Ritchie, 2003). Most importantly, public records can shed light on things that would not be possible to observe otherwise and especially, important events or processes which have preceded the study, revealing decisions and goals which would otherwise have remained in darkness (Patton, 2002). In this study for example, I investigated national policy documents, Local Authority policy statements and school policies relating to provision for gifted and talented pupils, or Additional Support Needs policies (which often include gifted and talented as part of the population in need of additional support). Moreover, I investigated self-assessment or external school reports to get a better idea of each case's strengths and weaknesses as perceived by Inspectors. For example, I spotted two particular Ofsted reports on St Achillas's RC (School 3) which were very intriguing. The first reported inadequate provision for the needs of gifted and talented pupils and the second reported that serious steps had been taken in order to cater for them, with remarkable results. I was therefore very interested in discussing with head teachers and teachers what the steps implied by Inspectors were and how 'current effectiveness' in catering for these pupils was measured.

Another type of documents, used in this study, is personal documents, which according to Bogdan and Biklen (2007) 'refer to any first-person narrative that describes an individual's actions, experiences and beliefs' (in Merriam, 2009, p.142). These can be diaries, letters or children's records which can give researchers an idea of what the perspective of the document's author is. In my study I used my own diaries which recorded my frustrations about issues arising in schools, my feelings or judgements about the things that took place during my interviews or observations in order not only to remind myself of particular events when analysing data but also to judge the degree to which my field notes were biased. Another source of 'personal documents' I used was records of pupils' assessments and examples of pupils'

assignments. These however, were not collected systematically, but relied mainly on chance. That is, depending on the relationship that was formed with teachers and pupils, I was often invited and occasionally asked to observe pupils' levels of achievement and teachers' assessment notes. Because these data were not collected systematically from all classes observed, they were used only as secondary sources of information, to enable me to understand specific issues raised by teachers during our interviews or observations.

Finally, I used some visual documents in my study. Visual documents can be found within the two other sources described above and can include photographs, videos or sketches (Merriam, 2009). During my case study observations I took pictures of the classrooms I was observing (when pupils and teachers were not present) to capture the visual resources used in classes or (pictures) of pupils' books in order to be able to compare the tasks assigned to each group and determine, where possible, pupils' ability to successfully complete their tasks. Nevertheless, these documents served as supplementary data to those collected from observations and their main function was to help me remember things that I observed but did not have enough time to write down.

5.5.4 Summing up the data collection process

In order to give a more complete idea of the process I followed to collect data in each of my cases, I will now give a short description of the sequence of steps I took (for more see following chapter). Before entering the school 'field', as I mentioned earlier, I studied relevant public documents concerning each of my cases, such as Ofsted reports, self-assessment reports, school policies or performance assessments, all of which were accessed through the internet. Data collected this way were recorded and saved in the files I created for each school. Then, I spent approximately 15 days case studying each of the participating schools. During this period, I conducted semi-structured interviews with head teachers and/or deputy-head teachers first, in order to gain a general idea of the school's general ethos and approach to gifted and talented education, the existence of any relevant school policies and to ask them to suggest other teachers to be observed and interviewed. Then, I started conducting classroom observations for a variety of courses/subjects trying to document (with notes) teachers'

attitudes and teaching techniques to cater for the needs of their more able pupils, while at the same time I was trying to get involved in the school and classroom's daily routines as much as possible. At the end of each day at a school, I documented in diaries my own thoughts summarising in a way my reactions to the day's observations. Field notes and relevant extracts from my diary were transcribed in jotters after I finished my data collection. By the end of my case studies one jotter for each school was filled. In some schools I spent a few hours in several classes and in others I focused on just three or four classes overall, depending on timetabling issues and teachers' willingness to participate in my study. During my observations, I often spent some time with groups of pupils (from a range of abilities), either observing them closely or supporting them with their learning. Initially, most teachers indicated to me a place where they expected me to sit and observe their lessons (usually at the back of the classroom far from the children). As they got to know me better, however, most teachers relaxed and not only did they let me choose where to sit (usually somewhere near the 'top' groups), but most teachers asked me to assist a number of pupils with their tasks. The short discussions held with pupils and the closer observation of their books and work, gave me an insight of pupils' opinions and feelings about their learning and their beliefs about their own ability. Most pupils were keen to know me better and they often approached me to show me their work, ask for feedback or relate an incident of their school or family life to me. However, sometimes teachers asked me to help with their 'lower ability' groups, in which cases I missed the opportunity to observe what was happening in the rest of the class.

I often chatted informally with members of the teaching staff during lunch breaks both to ensure that I was not seen as an outsider/intruder and to get clarifications on the processes that were taking place around me instead of making assumptions about them. These informal conversations were not recorded but I made sure to keep a note of them in my diary immediately after breaks. More formal, in-depth interviews were also held with most teachers whose classes were observed, a few days after first arriving at their school. As it was mentioned earlier in this chapter, the fact that most interviews were held towards the middle of the time I spent in schools enabled me to shape my questions around the things I had observed in class, which in turn

enlightened my observations and corrected possible misapprehensions. In addition, teachers were more relaxed with me and therefore more willing to discuss sensitive topics. All interviews were audio-recorded (using two devices) and verbatim transcribed (by me) shortly after they took place. The insights I got through the transcription of my interviews allowed me to ask for any clarifications when later meeting teachers again and helped me refine my interview schedule where necessary, thus optimising the ensuing interviews and facilitating the collection of better focused data (Shannak & Aldhmour, 2009). Finally, I should note here that the decision to spend approximately 15 days at each school was made before gaining access to schools, as head-teachers needed specific information before agreeing to participate in my study. I was therefore afraid that this period might be too short for me to get rich data. Luckily I realised that from approximately the 11th day in each school I reached saturation of information. By the end of the time spent in each school I had managed to get good idea of the school ethos, processes, routines and habits and an even deeper understanding of the specific classes observed.

5.6 Data Analysis

Data analysis is the 'process of resolving data into its constituent components, to reveal its characteristic elements and structure' (Dey, 1993, p.31) or according to Corbin and Strauss's (1998) more sophisticated definition, 'the interplay between researchers and data' (p.12) and his/her prior ideas with the purpose of building theory. In qualitative research, data analysis is (mainly) an inductive and comparative process: researchers use the data collected to develop categories, themes and theories, while constantly comparing them with one another and with emergent findings. Simply put, analysing data, researchers work with bits of information from their data which they gradually combine and order into broader categories and themes, thus working from 'the particular to the general […constantly] 'moving back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and interpretation' (Merriam, 2009, p.16 and p.176). Specifically in Critical Realism, when researchers analyse data they do not look for laws, but tendencies, which they call 'demi-regularities' and can be identified through qualitative data coding (Fletcher, 2017).

As many researchers have highlighted (Charmaz, 2006; Glaser & Strauss, 1967; Ritchie, Spencer & O'Connor, 2003), the analysis of data should happen early in the research process. Ideally, analysis should accompany the whole process of data collection. This enables researchers to find a better focus for their observations and interviews. Alternatively, without the focus obtained by this process, data will be in danger of becoming repetitious and unmanageable (Merriam, 2009). Thus, as it has been mentioned before, I endeavoured to analyse my data both in the field (writing notes in my diary) and out of the field (between observations and interviews). This was mainly achieved through writing memos on the data collected. As Mills et al. (2005) have highlighted, the method of 'memo-writing' is 'a reflective tool to record the researcher's abstract thinking about the data' (p.10) and enables him/her to reflect on prior knowledge around the topic. The employment of this method was continuous, namely I wrote memos both after interviews or observations and after finishing a case study, when I transcribed my data in order to make sure that emergent ideas would not be forgotten. This allowed the inclusion of the researcher's voice as another 'participant' or a co-constructor of meaning (Mills et al., 2005).

Having imported my data in NVivo (this will be discussed more extensively later in this section), I started *coding* an interview which I remembered was particularly enlightening. I first broke the interview into small meaningful segments, 'units', which could potentially answer my research questions, and compared them with other small units in order to identify possible regularities (Merriam, 2009). During this process, I assigned these units to codes, i.e. labels or tags, which summarised the meaning in the data (Basit, 2003). As Charmaz (2014) underlined,

> *'Coding is the pivotal link between collecting data and developing an emergent theory to explain these data (p.113). […] Codes emerge as you scrutinise your data and define meanings within it. Through this active coding, you interact with your data again and again and ask as many different questions of them. As a result, coding may take you into unforeseen areas and new research questions' (p.114)*

At this early stage of my analysis, data were 'open coded', that is attention was paid to all potentially meaningful segments of data in an expansive way, in order to gradually begin to make sense of what was happening within them (Charmaz, 2006).

Nevertheless, in keeping with critical realist philosophy, while coding I drew on existing literature and employed a deductive yet flexible coding process (Fletcher, 2017).

Specifically, while diligently coding my first interview, I soon realised that it would be helpful for my analysis to develop a list of codes drawn from the literature review. However, these codes were rather broad, and most of them changed, were supplemented with new ones ore were simply eliminated during the whole analytical process until all data were coded. Indeed, while analysing my first interview I developed 30 provisional codes which were mainly organisational (i.e. 'topic-based bins' where information is sorted (Maxwell, 2012)) and theoretical (i.e. derived from prior theory) (Fletcher, 2017). However, these codes were only treated as provisional codes and were changed, deleted or supplemented with new ones as the analysis progressed. In fact, over the course of this process, these 30 provisional codes expanded to over to approximately 200, which reflects the flexibility of the coding process employed (Fletcher, 2017). The same process was followed coding other observations and interviews.

Gradually, as I was getting deeper into the analysis, broader categories, referring to more than one codes started to emerge. I started to make decisions on which of my initial codes made 'the most analytic sense' to further group my data into categories (Charmaz, 2014, p.138). This process, called 'analytical coding' (or 'axial coding' in grounded theory), surpasses the descriptiveness of 'open coding', focusing on the interpretation of the meanings of data (Merriam, 2009). As Merriam (2009) explained, the categories which develop through 'analytical coding' are 'conceptual elements that "cover" or span many individual examples […] of the category. The challenge is to construct categories or themes that capture some recurring pattern that cuts across your data.' (p.181). Both of these coding methods ('open' and 'analytical coding') are emergent processes, which means that they allow for new, unexpected or conflicting ideas to develop and thus can potentially check a researcher's preconceptions about the topic (Charmaz, 2014). While creating categories, I re-examined the developed codes and started to arrange them into coding hierarchies. Codes referring to a similar aspect of my data were brought together under the same

'parent'-category, as 'sibling' codes and in turn could be 'parents' to other codes. As Gibbs (2007) noted, 'rearranging codes into a hierarchy involves thinking about what kinds of things are being coded and what questions are being answered' (p.73). During this cycle of coding, the originally large number of codes was gradually reduced to 160 and by the end of the analysis to only 86, as I re-organised them into conceptual maps (Fletcher, 2017). For example, the parent code 'origins of giftedness' was created to include the codes which referred to teachers' beliefs about where giftedness comes from and included the child codes 'mainly nature', 'mainly nurture' and 'both nature and nurture'. Moreover, by the end of the analysis all 86 codes were categorised into 19 broad categories, such as 'Provision', 'Identification', 'Challenges' etc. which will be reflected in the main themes of my findings presented in the following chapters. In addition to this, I used NVivo coding queries and tree charts to identify the most dominant codes (i.e. the most commonly coded) and connections between codes. I will refer to this more extensively on the next section.

The names of my codes and categories evolved from a mix of sources. As Basit (2003) pointed out, 'category names can come from the pool of concepts that researchers already have from their disciplinary and professional reading, or borrowed from the technical literature, or are the words and phrases used by informants themselves' (p.144). Therefore, depending on the substance of the unit coded, I named a category by the exact words used by participants (e.g. I used the code name 'challenge' which was frequently used by my participants to refer to harder questions or tasks assigned to their more able pupils in order to stimulate them); developed an original name which reflected what I saw in the data (data-driven coding) (e.g. I used the code name 'sense of justice' to refer to teachers' beliefs about which pupils deserve more attention or resources and why); or used a term found in the relevant literature (concept-driven coding) (e.g. I used the code name 'differentiation' to refer to instruction techniques or tasks teachers used to adapt teaching to pupils' needs) (Gibbs, 2007). Grounded theorists have been against the use of concept-driven data, advocating instead a data-driven approach to coding in order to remain as faithful to the data as possible. Nevertheless, as Gibbs (2007) highlights, 'a complete *tabula rasa* approach is unrealistic. The point is that, as far as possible, one should try to pull out

from the data what is happening and not impose an interpretation based on pre-existing theory' (p.45). Therefore, depending on the data analysed, I used all the above mentioned sources of inspiration to name my categories.

At the beginning of my analysis, during the development of codes and categories, the process followed was highly inductive. From looking at the small units of data and creating codes which were then gradually brought together to form categories, I moved to a more deductive process. That is, I progressively started to examine whether existing categories could 'fit in' with subsequently analysed data. Some categories would remain intact, while others would need to be refined. As I moved towards the end of this stage of analysis, I was thinking in a more deductive way, thus as Merriam (2009) pointed out, I was 'testing [my] tentative category scheme against the data' (p.183) until reaching 'theoretical saturation', i.e. till no new categories, variations and relationships emerged (Dey, 1999). After the main empirical findings (demi-regularities) of the research had been identified through coding, the next step was to re-describe data using theoretical concepts, which is called abduction (Fletcher, 2017). 'Abduction has been defined as a process of 'inference or thought operation, implying that a particular phenomenon or event is interpreted from a set of general ideas or concepts. [… It] raises the level of theoretical engagement beyond thick description of the empirical entities, but with an acknowledgment that the chosen theory is fallible' (Fletcher, 2017, p.188). Due to the critical realist ontology and epistemology - i.e. 'there is a 'real' world and it is theory-laden, not theory-determined' (Fletcher, 2017, p. 188) - all explanations were treated as fallible including the explanations provided by the researcher and research participants. However, as Redman-MacLaren and Mills (2015) argued, in qualitative critical realist research, participants' understandings and experiences can challenge existing scientific knowledge and theory.

The final stage of critical realist analysis is called 'retroduction' the focus of which is to identify causal mechanisms and conditions. As Bhaskar (1979) explained, retroduction moves from 'the manifest phenomena of social life, as conceptualized in the experience of the social agents concerned, to the essential relations that necessitate them' (p. 32). My purpose at this stage was to generate theory and make inferences

about the developed categories. I thus ceased to focus on small units of data and moved to 'a more conceptual overview of the landscape', in order to develop a theory explaining at least some aspects of the practices observed. This process was very demanding, as it was hard for someone who had delved into the exploration of small units of data to distance myself from it and 'shift into a speculative mode of thinking' (Merriam, 2009, p.189). Nevertheless, based on the data, I attempted to give some explanations for the situations observed and their causes. This process of hypothesising enabled the generation of theories (Cohen et al., 2018).

In addition to the above, in critical realism, comparative strategies are considered very useful for illuminating causal mechanisms. As Steinmetz (2004) explained, we may select specific phenomena to compare for 'explicitly political reasons or because we suspect them of having similar determinants. But they also should be selected because they are believed to be relevant to uncovering or illuminating the causal mechanisms and structures of interest' (p.393). In this study for example I decided to do within-case comparisons to determine whether schools employed a uniform approach to gifted and talented education, whether teachers took any initiatives which distinguished them from their colleagues, or to what degree school policies influenced their approach. Moreover, I did cross-case comparisons in an attempt to identify any causal relationships between the schools or to see whether their stated differences (e.g. in school policy statements) reflected differences in their education practice. In fact, as Steinmetz (2004) emphasised, comparisons among case studies is of the utmost importance for the better understanding of the social phenomena. That is because '[w]ithin open systems like the social, any event is the product of a multiplicity of generative mechanisms interacting in unpredictable ways' (p.394). In order to attempt to understand and explain the structures and mechanisms of the events studied, we need to employ comparisons and thus trace a range of important generative mechanisms. However, '[g]iven the necessity of reconstructing meaning and of studying the effects of mechanisms in overdetermined, open systems, it is implausible to expect comparisons to be anything other than small-N comparisons' (i.e. small number of cases) (Steinmetz, 2004, p.394). During all analytical stages, I constantly drew comparisons between data from interviews and observations of

different participants, different sources of data for the same participant at different points in time (e.g. interviews vs observations) (data triangulation), between incidents and statements within the same or different interviews, between different school-cases or between my thoughts documented on my diaries while on the field and the memos I composed later (Charmaz & Mitchell, 2001). Moreover, as Charmaz and Mitchell (2001) emphasised, the use of the 'constant comparative method' enabled me to '(1) compare data with data from the beginning of the research, not after all the data are in; (2) compare data with emerging categories; and (3) demonstrate relations between concepts and categories' (p.162). This lengthy process was facilitated through the use of some NVivo features. For example, I was able to organise my data not only by case-study (school) but also by participant or source of data collection, thus bringing together all the pieces of data I wanted to compare with one another.

5.6.1 Use of CAQDAS

In order to transcribe, store, file, code and retrieve my data I used NVivo, a Computer-Assisted Qualitative Data Analysis Software (CAQDAS). NVivo enabled me to import and display all my data, create codes and organise them in hierarchies, to examine codes in their original context, and create links between codes or between memos and codes. It also facilitated the recording of my ideas and searches through the data in order to find relationships between codes and categories. Moreover, through the use of NVivo, I could display my code list and arrange it hierarchically, add new codes or merge 'child codes' into 'parent codes' and also view all text filed under a specific code into a single (printable) file (Gibbs, 2012). Finally, as Creswell (2007) pointed out, the concept mapping feature of NVivo allowed me 'to visualize the relationship among codes and themes by drawing a visual model' (in Merriam, 2009, p.196). However, throughout the time I spent using NVivo, I kept in mind that although it is an excellent tool for the organisation and categorisation of (large amounts of) data, it cannot and should not do the analysis for me (Merriam, 2009).

Specifically, after loading NVivo to my computer, I created a project, named 'PhD Data and Analysis'. Then I imported all the interview transcripts, field notes from observations and my research journal files into the programme. As I mentioned earlier, I started coding an interview from St George's school (School 4) from a teacher

who used to be the school's Gifted and Talented Coordinator a few years ago and had given me a very detailed account of the school's approach to gifted and talented education in the past and at the time of the interview. I first read the interview twice making annotations next to the text and then started creating codes (which are termed 'nodes' in NVivo) from small meaningful parts of the text. As I was coding the first interview, I realised that I could create a list of main codes which related to my interview topics, since most of the things the teacher related to me were responses to my interview schedule. I thus went back to my interview schedule and created a list of 'parent codes': 'Terminology', 'Identification', 'Policies', 'Provision' and then based on the codes already created from the analysis of the first interview, some 'child codes'. For example, the parent code 'Identification' was subcategorised into: 'Test-based identification' and 'Observation-based identification' (later more 'sibling' categories were added) and the 'child code' 'Test-based identification' was further sub-coded into 'School-designed tests' and 'Externally-designed tests'.

This process of creating codes and categories was carried out until all transcripts were coded. During this time, my original categories and codes did not remain stable, but changed and developed as I was gaining a better insight into my data. Therefore my 'node list' was continuously modified. As these modifications took place, I made a note of my decisions on my research journal. Thus I gradually created a large codebook. This codebook, in line with Gibbs' (2007) suggestions contained not only a 'complete list of my codes, arranged hierarchically […] but also a definition for each along with any memos or analytic notes about the coding scheme' that I had written (p.40). Moreover, it included the label of the code, a definition of it describing the idea that refers to it and even examples of things that could be coded under the same code and the date the coding or re-coding took place.

Once all data were coded, I was able to generate reports, that I could print or save, and which enhanced the process of making comparisons. For example, I first created 'Document Reports'; a complete interview or all observations noted for one particular day were brought together and all the coding created for this document could be (re-)viewed. Then I generated 'Case reports'; all abstracts of data obtained from a specific participant were assembled in one document-report and all the relevant coding

for this 'Case' could be viewed next to the text. I could thus review my coding and make comparisons between the data derived from interviews, observations and documents. After I reviewed all cases, I created 'Node reports'; all abstracts of data coded under the specific 'Node' were assembled in one document and next to them other 'nodes' used to code the same extracts were depicted. This enabled me not only to review the consistency of my coding and compare data within the same code obtained from different participants but also to decide whether particular abstracts which were cross-coded should be 'un-coded'. Where more details about the context of the abstracts were needed, I could 'click' on the reference at the beginning of the abstract and open a new window, where the whole interview/observation could be scrutinised. Hence I managed to gradually reduce the huge amount of codes originally created and subsume them under wider and more meaningful codes. Finally, it was through the examination of these node reports that I slowly started to speculate and theorise about my findings.

To summarise, the process I adopted in order to analyse my data, after organising them in NVivo, was the following. Data were initially 'open-coded' adopting an iterative 'middle order' approach, i.e. alternating between a generation of some broad categories based on a broad comprehension of the data to a more detailed analysis (Dey, 1993). At the next phase, categories were developed in order to illuminate possible connections and patterns (Roller & Lavrakas, 2015), moving thus from a descriptive to a more analytic coding (Gibbs, 2007). Finally, themes and patterns across categories were created to allow for a deeper interpretation of the implications deriving from the data (Roller & Lavrakas, 2015). The use of NVivo facilitated my ability 'to revise codes and rethink coding schemes and categories [thus addressing] the critical need in qualitative content analysis to maintain flexibility' (ibid., p.249).

5.7 Validity and Reliability

In this section I describe the strategies I used throughout my study to enhance its validity and reliability. Depending on a researcher's ontological and epistemological beliefs, these two terms can have very different meanings.

According to Kvale's (2008) description, 'Validity in the social sciences pertains to the issue of whether a method investigates what it purports to investigate. […] In a broader conception, validity pertains to the degree that a method investigates what it is intended to investigate, to 'the extent to which our observations indeed reflect the phenomena or variables of interest to us' (Pervin, 1984, p. 48)' (p.122). Merriam (2009) identified two types of validity relevant to qualitative research; internal and external. Internal validity refers to the degree to which research findings capture reality. Therefore this concept relies heavily on a researcher's beliefs about reality. In other words, internal validity in a study like mine pertains to the degree to which multiple accounts of reality have been appreciated and the factors that have influenced the development of these multiple conceptions have been investigated (Merriam, 2009). The more direct our approach to data collection, the 'closer' we can get to reality. Therefore, using interviews and observations, my internal validity was strengthened, because these methods enabled me to present a holistic interpretation of the phenomena of interest and 'uncover the complexity of human behaviour', without the interjection of another data collection instrument between the participants and me (Merriam, 2009, p.215). Another strategy I used to boost the internal validity of my study was 'triangulation'. Denzin (1978) identified four types of triangulation through the use of multiple: methods, data, investigators and theories. In my study I used the first two types of triangulation; I collected data from multiple sources (teachers, head-teachers, support staff and pupils) using multiple methods of data collection (interviews, observations and documents). This process reduced the risk that the categories and theories developed from the analysis of my data reflect personal biases. What is more, triangulation in conjunction with the 'constant comparative method' (described earlier in this chapter), unearthed inconsistencies between data collected from different sources or using different methods, thus allowing me to better interpret the complexity of the phenomena studied. Finally, in order to enhance the validity of my study, I tried to be reflexive, by consistently comparing the categories derived from my analysis with my assumptions about the topic studied and minimising my bias. In the last section of this chapter, I will explain my assumptions and biases pertaining to this study more extensively in order to allow readers to understand how I interpreted the data the way I did (Merriam, 2009).

Reliability, as Kvale (2007) explained, 'pertains to the consistency and trustworthiness of research findings; it is often treated in relation to the issue of whether a finding is reproducible at other times and by other researchers' (p.122). A qualitative study however cannot be reliable (replicable) in the traditional sense. As Merriam (2009) stated, as human behaviour is never static, 'replication of a qualitative study will not yield the same results, but this does not discredit the results of any particular study; there can be numerous interpretations of the same data' (p.221). Hence when we are evaluating the reliability of a qualitative study we are looking at the degree to which 'results are consistent with the data collected' and dependable (ibid., p.122). Therefore if a researcher's interpretations of the data is not contradicted by other pieces of data within the study, then it can be regarded as dependable. The strategies I used to ensure the reliability or dependability of my study were triangulation (as discussed above) and the researcher's log. The first not only enhances internal validity but reliability (or credibility or dependability) too, by collecting data through multiple methods. The second, to which I have so far referred as a 'research journal', is a record where every methodological step that was taken throughout our study is recorded (Dey, 1993). Indeed, as I mentioned earlier in this chapter, I kept a research journal from the early stages of my research journey detailing all my ideas about the ways to design my study, all the obstacles I encountered, the new decisions I made and the reasons which led me to these decisions, the ideas that gradually evolved about the analysis of my data, how categories were developed and how relationships between categories were identified and so forth. In the previous sections I tried to give as detailed an account of my methodological and analytical steps as possible, based on the notes I had recorded on this journal.

External validity (or generalisability) is another very important factor which determines the quality of a research study and refers to the extent to which the findings of a case study can be applied to other situations (Merriam, 2009). This question of external validity has overwhelmed many qualitative researchers who have equated it with the notion of generalisability as viewed by researchers carrying out experiment and correlational designs, where the use of randomly selected samples, representative of the wider population enables them to make generalisations. Instead, as Merriam

(2009) argued, generalisability needs to be considered in relation to a study's philosophical underpinnings. Indeed, the purpose behind my decision to select a small number of specific cases was not to find out what the landscape of gifted and talented education in England and Scotland is, but to understand for example how selected participants' views about the nature of intelligence and their sense of justice influenced the ways they catered for gifted and talented pupils in their schools. My aim thus was 'to understand the particular in depth, not to find out what is generally true for the many' (Merriam, 2009, p.224). A more congruent conceptualisation of generalisability with qualitative research is as 'extrapolations', i.e. 'modest speculations on the likely applicability of findings to other situations under similar, but not identical conditions' (Patton, 2002, p.584). Underlying this conceptualisation lies the principle that although every case is unique, it can be an example of something else and what is learned from a particular situation can be transferred to subsequent similar situations (Walters, 2007). Thus if a case study is described in a way that 'captures its unique features', people can 'build up a body of tacit knowledge on the basis of which they can act' (Walters, 2007, p.98). To enhance the external validity of my study, i.e. to increase its potential to 'transfer' to another setting (ibid.), I used the strategies of 'thick description' and 'maximum variation'. The first strategy, is a term borrowed from ethnographic research, but is currently understood as a detailed, in-depth description of the findings and their context, with ample evidence from participant quotations or extracts from field notes and relevant documents. The other strategy, relates to the selection of the study's sample. Choosing cases which have different characteristics from one another (e.g. high versus low SES, excellent versus average results in national exams etc.) and participants within them who can illuminate phenomena from different angles, increases the likelihood of the findings to be considered transferrable to other cases (Merriam, 2009.). For this reason, I will give as detailed a description of my cases as possible in the next chapter. The reader will thus be able to determine the degree to which findings in the particular contexts described, can apply to other similar settings. Therefore, by accommodating and assimilating what is read and differentiating or integrating it with prior knowledge on the subject, learning is facilitated in the reader 'by substituting for first-hand experience' (Walters, 2007, p.99).

5.8 Ethical considerations

In this section I will explain all the steps I took to ensure that my study was ethically conducted. I will not only refer to the typical areas of concern, i.e. informed consent, confidentiality and anonymity, but also to less straightforward issues, such as participant's genuine choice to participate or walk away from my study or their resistance to cooperate despite their declared consent and to more specific ethical considerations which relate to the particular methods of data collection employed in my study.

Throughout my research, from the early stages of research design, to the time when I was 'in the field' or when I transcribed, analysed and reported my findings I strived to ensure that I took every necessary step to conduct my study in an ethical manner. The first issue that I had to resolve was participants' informed consent. As I have mentioned earlier in this chapter, access to the schools I case-studied was either gained through the original suggestion of a Local Authority officer and the consequent agreement from head-teachers or directly from head-teachers. In the first case, I was afraid that head-teachers might have agreed to participate in my study in order to 'oblige' their senior LA officer. Thus I repeatedly contacted head-teachers both by email and phone to explain what my study would involve and make sure that they did not have any concerns about their participation. I also assured them that on my first visit at the school I would explain in greater depth what my study entails both to them and the teaching staff and they would be able to walk away at any point of the study they wanted to. Indeed, I realised that one of the two head-teachers suggested by the LA officer was very hesitant in giving me access to the school. What mainly concerned him was whether participation in my study would over-burden teachers. Thus I suggested that I would initially visit the school twice and following my visits they could re-examine their involvement in my study. In fact, despite their original concerns, this school proved to be the one which welcomed me the most in its entirety. Where access to a school was gained only through head-teachers, I was again worried lest teachers were forced to participate in my study out of a desire to gratify the head

of the school. Again, I contacted teachers before arranging dates to observe their classes, explaining what their involvement in my study would entail and assuring them that whenever they felt that they could not meet my demands, they were welcome to withdraw their consent. Nevertheless, I soon realised that almost all teachers were not in the least concerned about their participation in my study in ways other than their fear that it might disrupt their teaching. As soon as I met them however, these fears vanished, and teachers viewed me more as a colleague or helper rather than as an intruder. In School 1 for example, teachers teasingly said that when I finished my observations I was welcome to keep visiting their classes and help them out the way I did during my study. Despite that, there were two particular teachers among all of my participants who resisted participating in my study. The first, was suggested to me by a head teacher as a possible participant and I was given her email address to contact her and arrange visits. After several attempts to get in touch with her, I got no answer to my emails. Later, having started to observe and interview other teachers in the school, I was again introduced to her by her colleagues. She said that she had got my emails but had no gifted and talented pupils in her class for me to observe. I tried to explain to her the purpose of my study and what participation in it would entail trying at the same time to make her overcome her reluctances. She consequently allowed me to spend one hour in her class and assured me she would then arrange other appointments. During my one-hour observation I could tell that she was very self-aware and stressed by my presence. Despite the fact that I was very intrigued to observe this particular class and investigate the reasons why this teacher was so reluctant, I soon realised that more important than satisfying my curiosity would be to respect her worries and not press her any further. Consequently, after observing her class for one hour I decided to give her some time to consider my request and email her again later to see what she thought. After ignoring my next attempt to communicate with her, I decided not to pursue the matter any further. And indeed when the head teacher asked me whether I had managed to include that particular class in my cases I concealed the reasons why I had not, stating that I had already included many teachers in my sample and did not need any more. The other teacher who did not participate in my study was a foreign language teacher who when I approached him to introduce myself and explain what I was doing in the school, rather aggressively said that no

students or researchers are ever allowed to observe his lessons and that he was not interested in hearing what I had to tell him. I naturally respected his decision, and although the classroom teacher had assured me that I should observe any lessons taking place in her class, I waited outside whenever this teacher was in the classroom.

Apart from these two instances, all teachers approached were very welcoming, polite and helpful and throughout the time I spent with them we formed a good relationship of mutual respect. From the very start to the very end of my study I kept explaining all issues relevant to my study and how anonymity and confidentiality would be ensured. Using pseudonyms was not the only measure I took to protect their anonymity and respect their confidence in me. The fact that I was doing selective multi-site case studies entailed the added danger that by describing the (unique) characteristics of some of my schools it might not be very hard for them to be identified by an informed reader. I thus made an extra effort to conceal the specific characteristics that might render some cases vulnerable to identification, by using aliases, general role descriptors and in some rare cases reporting different characteristics to the real ones in my descriptions of particular participants (e.g. different sex or different role in the school) to protect their identity, especially where there might be a risk for participants to be identified by insiders with possible negative effects on their career (Macfarlane, 2010). In the case of 'Da Vinci's School' however, it was not deemed just to conceal the fact that it is a Steiner school, because its distinct philosophy is very closely associated with the school's policies and provides the context to understand most of their processes. On the other hand, as it was mentioned in Chapter 5.4, the identity of the specific UK-based Steiner school was concealed by using pseudonyms and in some cases misleading gender or other minor descriptors. Besides, as there are 35 Steiner schools in the UK, sharing the same philosophy and common characteristics it is not easy to identify which particular school participated in my study. Finally, during my first observations, while recording my field notes in a special jotter (different for every school), I realised that given that I was sitting very close to pupils, who were very interested in what I was 'writing down' and I was often called away from my notes to help the teacher in one way or another, I needed to protect my participants by encrypting sensitive information. I thus decided to write all of my personal comments

or ‘delicate’ observations in my mother tongue, i.e. Greek, so that even if someone wanted to read them, they would not understand what I was reporting.

Another ethical issue which troubled me was that having developed a close relationship with most participants and as a result of an excessive effort to be respectful of them and their opinions, I occasionally ended up being partial. As I was getting more involved in each school’s daily routines, and having worked as a teacher in the past, made me feel more as a colleague with my participants than a researcher. Indeed, something equivalent happened with my most of my participants. Having got used to my presence everywhere in the school (classrooms, school yards, staff or assembly rooms) and having got used to seeing me get involved in most of their activities (e.g. help preparing a school fete or assisting with the supervision of pupils), they gradually treated me more openly and disclosed confidential information. I recognised this shift in our relationship later when analysing some of my interviews, out of a heightened feeling of loyalty to my participants (as well as gratitude for facilitating my study), I felt uncomfortable reporting specific opinions which I knew that at least to a degree might cause their professionalism to be questioned. I thus realised that instead of being a ‘dispassionate analyst’ I was in danger of becoming an ‘overly sympathetic advocate on their behalf’ (Macfarlane, 2009, p.76). Nevertheless, after reflecting on this and discussing my dilemmas with my supervisors, it became clear to me that being partial would diminish the validity and reliability of my research. Thus being respectful of them as well as keeping my promise to protect their anonymity and hold confidential information was all I could do to ensure that my study was ethically conducted. From that point on I tried to be more reflexive and fight my desire to shed light only on the positive aspects of my observations.

Finally, another ethical issue which should be mentioned here concerns my observations. When planning my research design and when contacting schools to explain what participation in my study would entail, I declared that my purpose was to interview teachers and observe teaching and learning in classes. My purpose was not to include pupils in the participants to be interviewed. However, in most schools, teachers encouraged me to adopt the role of a teaching assistant and invited pupils to approach me when they needed clarifications on their tasks. Soon, although all teachers

explained pupils in simple terms the reasons why I was in their class, all pupils treated me as a member of staff and approached me with questions, complaints about their peers or just to share some exciting news with me. In general I avoided initiating interaction with pupils as much as I could and made sure I did not ask any questions relevant to my study. Occasionally, I observed behaviours that created new ethical dilemmas, minor or major. For example, at some points, pupils copied the work of their peers during an assessment and the teacher was not aware of that. In such cases, I remained a pathetic observer and neither related my observations to the teacher nor scolded pupils. At one time however, I was sitting alone in class during a break when I heard some pupils abuse another one in the corridor. I immediately intervened, reprimanding them and then informed their teachers about the dispute. I decided that as Merriam (2009) pointed out, 'the literature on research ethics generally supports a noninterventionist position in fieldwork, [but at times] failure to act is itself an ethical and political choice that researchers must come to terms with' (p.232).

5.9 Reflexivity

Numerous authors have highlighted how important it is for researchers conducting qualitative studies to be reflexive (e.g. Powell, 2002; Probst, 2015; Sheppard, 1998). Being reflexive does not just mean being aware of our motives and assumptions but also articulating them in order to explain more clearly the context in which our study originated. As Hillier and Jameson (2003) argued, reflexivity is 'the ability proactively to reflect, analyse and self-critically vocalise our own reflections while maintaining a critical awareness of the nature of culture and society around us' (in Macfarlane, 2009, p.124). Two types of reflexivity relating to research have been identified: epistemological and personal (Willig, 2001). The first concerns our ability to critically question and report the decisions we made designing our study, choosing appropriate methods to collect data, approaching participants and analysing data, how these decisions were re-examined and how we developed as researchers through this process (Macfarlane, 2009). These questions have been addressed in the previous sections of this chapter.

The focus of the following paragraphs will be a discussion of the 'personal' type of reflexivity. By this term, Willig (2001) referred to the ways our personal experiences and values shaped our research and the opposite, i.e. how the research process reshaped our beliefs and thinking. In qualitative studies in particular, where the researcher 'is the primary "instrument" of data collection and analysis, reflexivity is deemed essential […]. Experts contend that through reflection researchers may become aware of what allows them to see, as well as what may inhibit their seeing' (Watt, 2007, p.82). For these reasons, just before relaying my findings, I will shed light upon my personal experiences and values which relate to this study in order to allow readers to better evaluate the degree to which my case studies' narrative has been affected by my biases and assumptions.

In order to be reflexive, I tried to report the following issues in my journal, as suggested by Ahern (1999, p.408-409):

1. The reasons for carrying out this research, my personal interests and relevant experiences (see below for more). Obstacles I encountered gaining access to schools and carrying out my interviews and observations (see Chapter 5.4 and 6). Personal or professional tensions that arose in doing this research.

2. Clarify the areas I consider myself an expert and those I feel uncertain of (e.g. I was not familiar with ability grouping practices and when they were first suggested to me as the most effective way to promote all pupils' needs I was not able to further question their effectiveness).

3. Describe situations or people where there may be role conflict, which participants annoyed me and why? Which made me feel at ease and welcome? How did the relationship established determine whom I approached more frequently and affect my interpretation of their accounts? For example, as I further explain in the following Chapter, there was one class where there was so much disruption I could barely concentrate on taking notes and because the teacher was constantly asked to resolve

arguments between pupils, she never found time to challenge her more able learners. I therefore was not very keen on observing her class in the fear that there would not be much for me to observe. Thankfully, I fought this temptation as I realised that all observations can shed light to the phenomena I studied and illuminate it from different angles. At the opposite extreme were a couple of other classes, whose teachers were very friendly and welcoming to me and I was tempted to spend more time with them instead of trying to persuade other, less friendly teachers, to let me include them in my study. Nevertheless, I did my best to carry out my research as planned, and unless there were any ethical considerations to be taken into account, I meticulously strived to include as many participants as possible in my study.

4. Examine the possible reasons why gatekeepers gave me access to their schools. Does it reveal a particular interest in my study? Or a sense of obligation to seniors? As I briefly pointed out in Chapter 5.4 and will further elaborate in the following chapter, one school was particularly interested in my topic, because of a previous Ofsted assessment which reported that the school failed to cater for gifted and talented pupils and they had consequently implemented specific strategies in the hope of improving on this aspect. Another school on the other hand did not recognise the concept of giftedness, but still participated in my study, in order to give them an insight as to why other schools considered the matter so important, as was later revealed to me by one of the school's gatekeepers. Being aware of these motives was helpful because it enabled me to shape my interview questions accordingly, in order to gain a better understanding of the reasons underlying their decisions to introduce specific policies and informed my analysis.

5. 'Recognise feelings that could indicate a lack of neutrality' (Ahern, 1999, p.409). For example, I felt very guilty when I had to report instances where some teachers might have behaved in a somewhat unprofessional manner (e.g. a teacher shouting to one of her SEN pupils who was frequently

distracted that he does not have to be clever to be able to copy something from the board, or another teacher admitting to me that he did not know how to teach spelling and therefore he decided to let more able pupils teach the less able ones how to spell). I tried to clearly articulate such feelings in my journal when they occurred, determine their origins, examine the possibility of my analysis being coloured by them and force myself to overcome the feeling that I was betraying them.

6. Report anything that is new or surprising in my data collection and analysis. I made sure I reported instances where there was divergence between what teachers had argued during our interviews with me and what I observed in class. When possible, I tried to ask teachers follow-up questions in order ensure that I reported was valid (see Chapter 5.7)

Specifically, in my study I looked into how primary schools within two different educational systems with different aspirations for education approached the issue of gifted and talented education. Growing up in a highly centralised comprehensive educational system in Greece, where teachers taught to the middle and *when* possible tried to support pupils with learning difficulties, I took for granted the necessity for teachers to primarily support the most vulnerable pupils and therefore tended to identify with those teachers in my study who shared similar ideas. Moreover, my experience working from a very young age, in a one-to-one basis with children with ASN, shaped the ways I always felt teachers should prioritise in their class. In particular, during my undergraduate studies I helped one of my cousins with her homework, because she was diagnosed as dyslexic and had difficulties coping with the homework assigned to her. A few years later I worked with a few more children, diagnosed as dyslexic too. In all these cases, I observed that their teachers despite the children's diagnoses, refused to differentiate instruction or homework assignments to their needs. As a result, all my pupils spent at least 5 hours daily to complete their homework, which totally deprived them of play- or relax-time and made them hate school. I believe this experience affected the way I treated my classrooms when I first started working as a teacher.

To be specific, I felt that one of my most important duties was to make sure that pupils with 'learning difficulties', as they are termed in Greece, experienced meaningful education and that their needs, despite the absolute lack of any type of support from the state, would be catered for. Therefore, despite having pure motives, my actions could be described as biased. I paid more attention and spent all my energy and any additional time I could (lunch breaks and after-school hours) on those amongst my pupils who struggled. The realisation of this bias happened gradually and was a great shock to me.

It was on my third year teaching for a primary school, when I realised that one of my most able pupils, who was constantly ahead of the rest of the class, and was quite confident with the concepts introduced in class, before any instruction on my behalf, had probably never been meaningfully challenged by me. At that time differentiation (of any kind) in Greek classrooms was not only comparatively new but teachers were also suspicious of it as incompatible with the ideal of equality of opportunities. In addition, pupils were and still are not set or grouped by ability in state schools and any attempt to do something like that would lead to serious conflicts between teachers and parents, thus the idea of any selection by ability was very alien to me. The above experience was one of the main reasons why I decided to take up further research on the topic. In addition to this, I decided not to carry out this study in Greece, because at that time, Greek Universities did not have any specific courses on gifted and talented education and there were no relevant national policies available to guide teachers how to cater for them.

Given the different policy background between Greece on one hand, and England and Scotland on the other, both regarding gifted and talented education and provision for pupils with ASN, I had high expectations of the schools I was going to study. Having never experienced support teachers helping teachers with their ASN/SEN pupils in mainstream classrooms, or setting and ability groupings, having never experienced proper differentiation of instruction or tasks, I was very enthusiastic about all the pedagogical practices my participants (stated they) were using. For example, the novelty of homogeneous groupings as well as most of my participants' conviction that they promote gifted and talented pupils needs, easily persuaded me of

its efficacy at first. Comparing my personal experience, where gifted and talented pupils were not only neglected but to most teachers non-existent, I was very impressed by some of my participants' awareness of their characteristics and their declared commitment to cater for them and was thus ready to take them at their word. I particularly remember a meeting with my supervisors soon after the interviews with two of my first participants had taken place, where I was telling them how much I was looking forward to starting my observations, because teachers appeared to be very well informed on the topic and had an interest in catering for their most able pupils. My eagerness to improve myself as a teacher, made me too eager to believe in the effectiveness of the pedagogical practices proposed by my participants. Thankfully, the fact that I was keeping a reflective journal noting what I might be able to observe in schools, based on what strategies teachers told me they were implementing during our interviews or based on the schools' policies (where applicable), enabled me to compare what I was observing in class to what teachers had said they were doing in class and realise my positive bias (see for example Chapter 9.2). This realisation made me more systematic in keeping my journal and adding comments about my feelings following an observation or interview. Reviewing these journal entries later, I realised that my impression that an observed teaching practice was effective might have been affected by the bond I had developed with particular teachers. For example, as it has been mentioned earlier, the fact that I felt gratitude to teachers for facilitating my study and the friendliness which was soon developed between us, jeopardised my ability to question their motives and the effectiveness of their choices. Moreover, whenever teachers pointed out to me that less able pupils' needs have to be prioritised over the more able ones' in the name of justice or equality of opportunity, I easily identified with them and sympathised with their motives. To fight this compulsion, I decided to question every conclusion I had reached again and again by allowing some time to distance myself from my cases, review the relevant literature and then return to the analysis of my data again.

To summarise the ways in which being reflexive had an impact on my study: 1) it enabled me to uncover the reasons (and subjective motives) for carrying out this research (e.g. a strong feeling of guilt at having 'failed' my more able pupils), and 2)

uncovering my biases enhanced the trustworthiness of my study (I returned to my data several times comparing notes from observations or interviews in order to ensure I was not being biased), 3) it enabled me to identify fallacies in my methodology and adapt it accordingly (for example I decided to carry out interviews after a few observations had taken place in order to be able to ask more meaningful follow-up questions which reflected what I (thought I) had observed), 4) improve my effectiveness as an interviewer and observer and 4) by revealing tensions and issues which arose during the analysis of my data made me realise the complexity of carrying out a qualitative data analysis. To conclude, being reflexive was the most challenging, taxing and thought-provoking element of my study but the most beneficial in teaching me how to become a researcher.

In this chapter I have attempted to clarify my research aims and questions, to explain the methodology I used and account for my decisions of sampling and methods and to illustrate the ways I analysed data and the steps I took to ensure that my study was ethically conducted, reliable and reflexive. In the following chapter I will give a description of each of my cases.

Chapter 6 **Description of Cases**

Following the discussion about my methodological decisions, I will now describe briefly each of my cases in order to highlight each school's main characteristics and the key processes adopted for the educational provision of gifted and talented pupils. It should be noted here that the year Inspection or Ofsted reports of the case-studied schools were published is concealed in order to protect the schools' anonymity.

St Hermylus's RC (School 1)

St Hermylus's RC is a denominational primary school which serves a wide area of one of the biggest councils in Scotland. Approximately 300 pupils are enrolled and the proportion of pupils entitled to free school meals is 17% (while Scotland's proportion is 20.6%). Attendance according to Inspection reports, is above the national average and an approximate amount of 70% achieve the expected level in literacy and numeracy at the end of P7. One of the school's challenges is the fact that a large number of pupils speak English as a second language. In order to include these pupils as much as possible, the school has introduced several strategies. For example, older pupils who speak the same language, read English books to the younger ones once a week and then discuss together the story read in their mother tongue. Another major challenge teacher's face, is the very small number of support and learning assistants employed by the schools, which combined with the former challenge makes teaching in the younger ages particularly difficult.

HM Inspectors identified the following key strengths for this school: A) A welcoming ethos and the value placed on children as individuals. B) Assistance given to children with additional support needs. C) An open and inclusive approach to all children and families but particularly to those from other religions and cultures. D) The commitment of staff and parents to the school, and the polite, courteous and well

behaved pupils. However one of the main points that the school needed to take immediate action to, according to the HM Inspectors, was raising teachers' expectations of what pupils could attain and increasing the level of challenge for all pupils (Inspection report, 20xx). In more recent, follow-up reports, it has been identified that much progress has been made towards meeting the points raised by the Inspectors. As it was stated on the subsequent Inspection, pupils now participated in a suitably stimulating range of activities. Teachers shared learning intentions with pupils and used an appropriately broad range of methods to assess individual progress. Pupils responded well to teachers' raised expectations, were aware of what they needed to do to improve and were involved in discussions with their teachers about their progress and their next steps in learning.

In this school I spent 15 days, during which time I observed at least one class from each year and formally interviewed 4 teachers. The acting head of the school was very keen to welcome me in the school and after introducing me to her colleagues she insisted that they spoke to me. Most teachers were very welcoming and after a few hours spent in their class they considered me as their colleague. To this contributed the fact that the number of support teachers/ teaching assistants employed in the school was quite low and teachers' work was extremely demanding. They therefore appreciated my presence in their classes, as I was seen as an extra adult with teaching experience, who could spend some time helping them by supporting a couple of groups when they worked individually. However, as it was mentioned in the previous chapter, one of the teachers suggested was very reluctant to allow me to observe her class claiming mainly that there were no gifted and talented pupils in her class and after several attempts to overcome her reluctance I decided it would be unethical to keep persisting on my request.

As argued by all teachers in this school, the main way they served their most able pupils was by grouping them homogeneously. At the younger years, teachers organised pupils in ability groups of 4-6 pupils for numeracy and literacy. Specifically, the lessons usually started with pupils sitting as a unit on the mat, in front of the smart board and teachers doing a short revision and/or introduction of the next topic with whole-class instruction. Next, teachers usually explained the tasks pupils would work

on and instructed them to join their literacy/numeracy groups. Each big table in the class was used as a 'work station' for one of the 5 tasks pupils would have to work on. Each group spent some time in each of the tables and by the end of the lesson every pupil would have worked on the same tasks. The tasks usually consisted of embedding and less often extension exercises. While pupils worked on each task-table, the teacher was working with one of the groups. Therefore, by the end of the lesson she would have spent some time observing closely and instructing all small groups. Despite the fact that pupils were grouped, they almost always worked on their tasks independently and were not asked to cooperate. It should be also noted that especially the younger classes had to deal with not only the usual learning or behavioural difficulties but also with serious communication issues arising by the fact that up to 1/3 of the pupils did not understand or speak English at all.

The older years were within-class ability grouped for literacy and set in three cross-age sets for numeracy. That is, there were three sets for Primary 4 and 5 and another 3 for Primary 6 and 7. Within each set, pupils were further grouped by ability and different resources were used for each group. In P7, pupils were also set for literacy. What is more, the head teacher and teachers were considering introducing setting from Primary 2. However, setting had only been introduced in the school at the beginning of term and staff was planning to evaluate it and decide how to proceed in the future, but they seemed quite satisfied by it overall, although they did not explain the basis on and the processes through which the 'effectiveness' of setting was assessed.

Macbeth Primary School (School 2)

Macbeth Primary is a state funded school in an accessible Scottish rural area. There are currently approximately 150 pupils on roll and 8 teachers are working there full time. The proportion of pupils entitled to free school meals (FSM) is 5%, which is well below the national average for Scotland. Pupils' attendance is above the national

average and an approximate amount of 70% achieve the expected level in literacy and numeracy at the end of P7.

According to a recent Inspection Report for this school, attainment in English language and mathematics was overall good, although standards of attainment had remained steady over the years. Tasks and activities met pupils' learning needs within class lessons. At the early stages a small number of higher achieving pupils were not making sufficient progress in aspects of their learning. Across the school, staff had been highly effective in identifying pupils who required additional support with their learning or behaviour. These pupils had appropriate long- and short-term learning targets in their individualised educational programmes (Inspection report, 20xx). As I was informed by the teachers, they held frequent meetings with the head teacher, during which, they discussed about their more able and less able pupils and suggested possible strategies to promote their needs. However, according to the HM Inspectors, quite a few pupils were not making enough progress towards achieving these learning targets and attributed this to the fact that the work of the support for learning teacher was not well focused on providing specialist support to these pupils. However, according to the HMI, all staff worked very effectively with a number of agencies, including psychological services, to meet the needs of pupils with more complex additional support needs.

In this school, I spent 14 days, during which time I mostly observed Primary 2 and Primary 7, who had originally volunteered to participate in my study. Towards the end of my case study of the school, I managed to include two more teachers/classes in my sample, after the very kind encouragement of one of the teachers I had been thus far observing. However, only 3 out of the 8 teachers consented to be interviewed. In most of the classes, teachers grouped pupils by ability in literacy and numeracy. The lessons usually started with a whole-class revision and introduction to the new topic. Pupils were sitting with their learning partners (mixed ability grouping) on the carpet, but often teachers addressed tailored questions to the various 'ability' groups. Next, they explained the tasks pupils would have to work on individually. Most of the time there were 3 'Chilli Challenges' available for pupils to work on; the mild, the spicy and the hot. All pupils were required to complete the first two challenges and usually

only the more able pupils were instructed to move to the third challenge, *after* they had finished the other two. Pupils were asked to work on their tasks independently and sit with selected by the teacher peers from different ability groups. More able pupils were expected to support the less able when the latter were stuck or not concentrating on their work. Meanwhile, the teacher instructed and/or assessed one of the groups, who joined her on a separate table located at a distance from the rest of the tables.

The process described above was followed by most classes. However, in Primary 7, instruction was 'differentiated by choice'. To be specific, as the teacher informed me, pupils were asked to choose the level of difficulty they wanted to work on whenever a new topic was introduced. They were asked to assess themselves and decide whether they wanted to work on mild, hot or spicy tasks for the duration of the topic. Whenever though the teacher judged that the chosen level was too easy or hard, advised them to move to the most appropriate group and supported them with one-to-one instruction in lunch time if necessary. This method of differentiation was not observed in any of the other classes or schools. Finally, it should be noted here, that most teachers in this school and especially the P7 teacher encountered issues of disruption and aggressive behaviour which unsettled their routine and forced them to spend much time trying to resolve them.

St Achillas's RC (School 3)

St Achillas's RC is an average-sized denominational junior school in the north of England. There are currently approximately 250 pupils on roll. The school is federated with an Infant School and the two schools share the same governing body. The vast majority of pupils are of White British heritage. The proportion of pupils supported by the pupil premium (additional funding for those pupils who are known to be eligible for free school meals, children from service families, those that are looked after and those who have been in the public care system) is 10%. The proportion of pupils with special educational needs is average (1%) and 70% of the total school population is meeting the expected standards in literacy and numeracy. As Ofsted

(20xx) reported, the school meets the government's current floor standards, which set the minimum expectations for pupils' attainment and progress in English and mathematics at the end of Year 6.

Noteworthy is that according to a previous Ofsted report (20xx) the school was characterised 'good' and not 'outstanding' for the following reasons. Standards in reading were not as high as they should be and the quality of teaching was not consistently good across the school. As a result, the rate of progress was slower than it should be in some year groups. Moreover, as it was argued, teachers did not always plan lessons that meet the different learning needs of all pupils, especially the most-able ones, who, as a result, do not always make enough progress.

On the most recent Ofsted report, however, the school was characterised as 'outstanding' and was especially praised for the excellent progress pupils made in reading, writing and mathematics. "Those that are more able, those with special educational needs and those whose circumstances could put them at a disadvantage all make rapid progress from their starting points. They reach standards that are above average and make greater progress than their peers nationally. The school is successful in striving for excellence" (Ofsted report, 201xx).

In this school I managed to spend 12 out of the 15 originally agreed on days. Indeed although this was the first school which consented to participate in my study it took me quite a long time to complete my observations, as a result of much last-minute rescheduling on their behalf. It should be noted that as my visits took place from the end of one school year to the beginning of the next, I observed different pupils (though mostly the same teachers). On entering the school I was not introduced by the head teacher to the school staff but only to the two teachers who had originally agreed to participate in my study. As a result, despite the fact that I spent breaks in the staff room, I found it extremely hard to interact with other teachers. Moreover, the school employed a quite large number of teachers and support staff which made it harder for me to get acquainted with them. In our communication before first visiting the school, the head teacher suggested that I observed two teachers- a mainstream and a maths teacher employed to teach the most able pupils and agreed to participate in a semi-

structured interview with me. However, I only met him accidentally two or three times throughout my stay in the school and I did not manage to interview him. Instead, the deputy head teacher was asked to get in touch with me and 'help me with my research'. It took me quite a while to establish a less formal relationship with the rest of the teaching staff and thus manage to include more teachers in my sample. Nevertheless, by the end of my visits at the school I had observed 7 classes and interviewed 6 teachers. As I mentioned earlier I did not manage to spend 15 days at the school as planned, because teachers kept rescheduling. At one point for example, a whole week's visits had to be rescheduled due to the fact that Ofsted inspectors would be present at the school. At other points teachers had forgotten our appointments and were on school trips when I arrived at the school or pupils were engaged with school assessments and there were very few things for me to observe. Such obstacles are understandable given teachers' multiple duties and heavy schedule. Had I not been travelling more than 3 hours to visit them (and another 3 to return), paying for train tickets, and had teachers been more flexible (e.g. allowing me to observe another class when the one agreed to was not available) such incidents would not have been so frustrating.

In all classes observed, teachers grouped pupils by ability for numeracy and literacy and argued that they used mixed grouping for the other subjects. Frequently, however, pupils were asked to join their 'literacy groups' in other topics, such as Religious Education or Science. What is more, despite being organised in groups, pupils were asked to work on tasks individually most of the time. Apart from the within class grouping, setting was established across the school for numeracy. Pupils between Year 1 and 4 were set in two ability groups each, while Year 5 and 6 pupils were set in three. Responsible for the 'top sets' for Year 5 and 6 was a specialist maths teacher employed for that purpose a couple of years ago. Although the 'top sets' were by far the smallest of all, pupils were further grouped within their set in smaller ability groups. Although pupils were organised in groups, they were very rarely asked to work on a task with their peers. Setting was also established for literacy in Year 6. The allocation of pupils to the various maths sets was based on formal (written) assessment of pupils' attainment as well as teachers' observations.

Lessons in mainstream classes usually started with whole-class revision and/or introduction to the new topic. Next, pupils were asked to join their literacy tables and were instructed on how to work on their tasks. The tasks ability groups were assigned to complete were almost always differentiated. However, the main difference on the tasks was on quantity and not quality, e.g. lower ability groups were assigned two or three questions, while higher ability groups were assigned the same activities as the other groups and a few additional ones, although difficulty was not increased. Teachers and, when present, teaching assistants too, focused mainly on the less able group most of the time. This was usually the group in the nearest proximity to the teacher's desk. However, teachers argued that organising pupils in groups allowed them to spend some time each week with all groups. The top set maths lessons started always with a timed quiz on time tables or other simple mathematical operations and continued with several other more demanding written assessments. The teacher then introduced the new topic mainly with inquiry based instruction and finally pupils were asked to work on embedding tasks. They were split in two different groups, each working on a different version of the same task- an easier and a more demanding. Overall, this school encouraged competition among pupils, especially in numeracy. Competitions within class and across the school were frequently arranged and there was an overall expectation of pupils to 'strive for excellence' in line with the school's motto.

St Giovanni's RC (School 4)

St Giovanni's RC is an average-sized, suburban, denominational primary school in the south of England with approximately 200 pupils on roll. Both the proportion of pupils known to be eligible for free school meals (7%) and the proportion of pupils with a statement of special educational needs or a statement of Education, Health and Care plan (2%) are well below national average. Most pupils are of White British heritage and a very small percentage is from minority ethnic groups. As reported, 70% of the school population meets the expected standards in literacy and numeracy.

According to the most recent Ofsted report (20xx), the school's overall effectiveness is outstanding. Specifically, as it was highlighted on the report, pupils enter nursery with skills slightly below the levels expected for their age but when they leave at the end of Year 6, their attainment is well above the national average due to outstanding teaching, highly effective leadership and a rich and vibrant curriculum. 'In many cases, pupils are up to two terms ahead of those elsewhere' (Ofsted report, 20xx). What is more, 'almost all pupils make excellent progress. The skills of children are quickly developed in the Early Years Foundation Stage and so they make rapid progress. By the end of Year 2, attainment is generally above the national average, and progress accelerates further in Years 3 to 6. This pattern of high achievement has been sustained over a number of years' (Ofsted report, 20xx).

I spent 14 days in this school during which time I managed to establish a friendly and relaxed relationship with the teaching staff. This is mainly owing to the fact that I was welcomed by the head teacher quite warmly at my very first visit and was introduced by him to all teachers and pupils. Because of this welcoming environment I did not feel as an intruder, but almost as a colleague and I did not thus hesitate to ask teachers to allow me to interview or observe them and discussed with them during breaks about issues pertaining to my research. This, I believe, allowed me to get a wide and clear idea of the way the school worked as a unit. By the end of my visits at St Giovanni's RC, I had observed all classes from Reception to Year 6 and had interviewed most of the teachers as well as a Teaching Assistant.

Here, all classes were organised in different ability groups for literacy and numeracy. Often though, teachers instructed pupils to join their 'literacy tables' to do some work on Religious Education or 'topic'. At the beginning of a lesson, pupils usually sat on the carpet at the front of the class doing a short revision followed by an introduction to the new topic with direct or inquiry based instruction from the teacher. Teachers asked pupils questions which they had to discuss first with their 'learning partners' and then with the rest of the class. As teachers explained to me, learning partners were selected in order to allow for peer teaching, thus a more able pupil was paired with a less able on the premise that one would be able to support the other's learning. After that, pupils moved to their ability tables and worked independently on

differentiated tasks. Teaching assistants spent their time almost exclusively with the less able groups. Teachers on the other hand, tried to spend equal time with all groups, supervising their work and giving them feedback when necessary.

Year 6 however, worked slightly differently. The classroom teacher was very focused on preparing pupils for SATs as she blatantly admitted. Specifically, her class was organised in 'rank order'; the most able pupil was seated on the furthest right end of the class and the least able one on the opposite end. As the teacher explained to me, the classroom's sitting plan formed a snake with head the most able and tale the least. What is more, often the teacher split the class in two groups and instructed them separately. One group moved to the IT room to do some relevant tasks with another teacher, while the other remained in class. After a while, the groups changed teachers, enabling thus the Year 6 teacher to work with smaller groups. Moreover, she gave extra after school lessons to two set (by ability) groups twice a week for 1.5 hours. The aim of all the above was mainly a better preparation for national tests in literacy and numeracy, but according to this teacher such strategies 'could better serve gifted and talented pupils'. The latter will be discussed in greater detail in Chapter 11.

Da Vinci's School (School 5)

Da Vinci's School is one of the 35 Steiner schools in the UK and Ireland (https://www.steinerwaldorf.org/). To protect the school's anonymity, the jurisdiction in which it is located is not revealed here. As it has been briefly mentioned in the previous chapters, this independent school differs from other state-funded and independent schools in various ways. The first Steiner school was founded by Rudolf Steiner, an Austrian philosopher, in 1919 in order to educate the children of the Waldorf-Astoria factory's employees (Ashley, 2005). Steiner developed his own philosophy about education, known as 'anthroposophy' and this continues to underpin Steiner schools worldwide. As Ashley (2005) argued, 'of all the anthroposophical principles that govern the pedagogy, by far the most significant is attentiveness to child

development, underpinned by ongoing child study […which] makes Steiner schools highly resistant to the emphasis in maintained schools on competitive testing' (p.3).

Moreover, as a teacher from the school pointed out to me, 'in contrast to other independent schools, our admissions procedure [which is not based on written assessments] means we welcome pupils of all academic abilities and value them for what they bring to the school community'. Besides, they are not interested in just raising pupils' attainments on academic assessments, but in addressing 'all the multiple intelligences, including emotional literacy and kinaesthetic learning, while bringing into balance the attributes of the right and left hemispheres of the brain'. This, as they claim, 'develops analytical, logical and reasoning skills as education has always done, but also focuses on the development of imagination, creativity, memory and flexible thinking'. Despite this, they pride in the fact that their pupils 'consistently achieve far above the national average' in Highers. However, as Randoll and Peters (2015) reported, many pupils frequently feel under-challenged, because teachers focus on the academically weak students. Reports such as the above were very intriguing to me, since my aim in selecting cases was to include not only schools which argued they champion most able pupils' needs but those who seemed to focus on the lower end of the class too (see Chapter 5.4).

Da Vinci's School differed from the other schools in my sample in various ways. For example, they delay the start of formal (desk based) learning until the age of six or even seven years, allowing, as they argued, pupils to develop literacy, numeracy and social skills through play-based learning in the Kindergarten. This, it was claimed, 'is hugely beneficial to development because, when they do enter the Lower School, our pupils are ready to embrace formal learning'. Pupils at the Lower School were aged between 6 and 14 years old (Classes 1 to 7). Most classes observed were considerably smaller than most mainstream schools, with approximately 20 pupils. Children between 7 and 14 years old are taught by the same teacher for eight years, but simultaneously experience a combination of unique to Steiner schools specialist and 'main lessons' (Ashley, 2005). These 'Main Lessons' were 'topic blocks' which were studied daily for up to two hours over four weeks. Using cross-subject learning, they were considered to 'create a deep, rich and broad appreciation

for the topic being studied'. As Ashley (2005) pointed out, main lessons are 'governed by the need to adhere to rhythmic principles which require them to be closely in harmony with the children's physical and mental cycles (p.3). That would mean that in order to teach a main lesson, teachers would use movement, story-telling, music, ritual and drama, whilst focused on a particular topic, using cross-curricular links (ibid.). Those lessons included the following areas: History, English, Mathematics, Environmental Studies and Religion. For example, as it was reported, in Class 5 (age 10-11) pupils enjoyed a 'Main Lesson on Ancient Greece. Rather than studying the subject from a textbook, pupils were required to build their own Main Lesson books as a record of the topic. The Class Teacher combined Maths, Literature, Creative Writing, Mythology and History in a creative and engaging delivery. Practical application of the subject is a key ingredient of Main Lessons. During Ancient Greece, pupils joined with children from other similar independent schools across the UK to participate in a re-creation of the traditional Olympic Games'.

Some of their 'extracurricular topics' included: French and German, Gardening, Eurhythmy, Handwork, Craft, Drawing, Painting, Drama, Music and Games/Gym, most of which were taught by different teachers. As they emphasised, 'studies show that the development of fine motor skills in early childhood is linked to later cognitive ability. Practical work with wood, clay, textiles and other materials feature at every level of the school. By teaching children to knit when they are six, we are actually building their capacity for independent thought when they are 16'.

I spent 15 days in Da Vinci's schools observing Classes 2, 3, 5 and 6, and was deeply involved in the school's activities. For example, on a couple of occasions I swept the school yard with the Class Teacher and her pupils, since this was the way they had decided to spend part of their day. I also helped prepare a school meal with an older class observed at the time and actively participated in the school's Christmas fair by preparing a couple of Greek desserts to be sold at the fair's stalls. I was also, urged to create my own knitted 'little person', by the Handwork teacher, to which request however, I resisted, since my knitting and sawing skills are extremely limited. Contrary though to what I experienced in the other four schools, I was never asked to assist teachers by supporting one or more pupils. Although I did not manage to get

acquainted with all teachers working at the school, mainly because they did not meet at a staff room during breaks, most of the staff's friendly behaviour made me feel welcome at their school. By the end of the time I spent at the school I had observed four classes and interviewed 5 teachers.

One more respect in which this school differed from the other schools in my sample is the way pupils were seated and instructed. There were no group tables as in all other schools observed and pupils were not grouped by ability. Often, teachers split the class in two smaller mixed ability groups for maths in order to 'manage the class more effectively' and most of them strongly opposed to ability grouping, as they believed it is only effective for the 'more able pupils' and not for the rest of the class. Despite this, setting was applied in the higher school and sometimes in Classes 7 and 8 for maths only. Moreover, pupils were seated in single use desks and worked independently most of the time. The teachers' instruction was addressed to the whole class and there were very few examples of differentiation of the tasks given to pupils observed. However, pupils had the opportunity to interact with each other during the course of the day, although, it was less frequent for older pupils to interact in big groups than younger ones. Main Lessons usually started with a demonstration from the teacher, then pupils were asked to move their tables to the corner of the class and play relevant games with the teacher and their peers, or work on an experiment. After that, they moved back to their tables and worked independently on their books.

Another interesting feature about this school is that the classroom environment was a little old fashioned; there was absolutely no use of IT before secondary school, the resources (e.g. maps, dictionaries etc.) used in class were rather old, pupils' desks formed rows and columns (allowing thus minimum interaction with each other). In fact, as Randoll and Peters (2015) reported, Steiner students have complained that lessons are too often 'teacher-dominated', and there is little opportunity of group work or 'self-motivated study'. Moreover, as I observed, some, mainly specialist teachers, used traditional consequences to punish pupils' bad behaviour (e.g. noting down their names to be handed to the school's management or classroom teacher, time-out spent outside the classroom etc.).

Having given a brief and general description of each of my cases, I will now proceed with a more specific analysis of my main findings, relating to teachers' conceptualisation of giftedness, the identification processes followed by each class/school, their approach to provision and ability grouping and teachers' viewpoints on relevant policies.

Chapter 7 Conceptions of giftedness, ability, identification

The aim of this chapter is to present and discuss the main findings of this study relating to the ways participants understood and defined the concept of giftedness, the terminology they chose to use, the main characteristics they attributed to gifted and talented pupils, their beliefs about the nature of giftedness, the processes they followed to identify them and the ways internal or external assessments affected the school routines. I will first give a brief account of the key findings concerning all these areas and then proceed with a more detailed analysis of each of them.

In theory the great majority of teachers across the schools acknowledged the existence of a group of pupils who could be described as 'gifted'. In practice though none identified a gifted or talented pupil in their class, but only spoke of pupils who could be described as 'bright', 'more able' or the 'top group'.

Scottish teachers engaged with the questions of definition, terminology and key characteristics less than their English counterparts. The former despite being repeatedly asked to discuss about their gifted and talented pupils' characteristics and abilities they tended to discuss about their pupils' needs and under the assumption that gifted pupils have fewer needs than less able pupils, they focused on the importance of providing, as they argued, opportunities for the latter, 'who are more in need of them'. Another interesting key point is the fact that when teachers engaged in the discussion of specific more able pupils, they tended to focus on their perceived weaknesses and how these should be tackled, while also comparing them with their less able peers' strengths. This phenomenon has been also observed by Siegle and Powell (2004), who having found that primary school teachers nominate gifted and talented pupils much less frequently than gifted and talented specialists, attributed this to teachers' predisposition to recognise and remediate weaknesses as opposed to gifted specialists' tendency to build on strengths.

English teachers appeared to be better 'informed' about gifted and talented pupils in general. Most mentioned that they identified and provided for them in several ways. However, when they were asked to give more specific examples, they were generally reluctant to identify any particular pupil, arguing that they only have 'more able' pupils in their classes at the moment.

Teachers at Da Vinci's School (School 5) however behaved in a very different manner toward the issue of gifted and talented. All teachers rejected the notion that there is a group of pupils who could be classified as gifted and did not use any term to describe them. Some teachers spoke of some 'bright' pupils but did not identify them as a distinct category. However, as will be indicated later on this chapter, the term 'bright' functioned as an acceptable or 'politically correct' euphemism for all sort of terms. Teachers argued that each pupil is an individual case and is gifted at something and should therefore be treated as such. This reflects the often cited myth 'everyone is gifted' which often serves as an excuse not to identify pupils' gifts and talents and tailor provision to their needs (Porter, 2012). It may also indicate a lack of awareness of what 'giftedness' means if simply being good at something is interpreted as having a specific gift or talent and may account for the fact that when teachers in this school were asked to give examples of specific children's gifts, they vaguely answered that 'he/she is good at doing sums/reading/dancing' etc. It might finally reflect Borland (2009) and Pfeiffer's (2012) view that 'giftedness is a socially constructed concept' (p.3) and that teachers should realise that describing someone as gifted is nothing more than 'an invented way of categorising children' (Pfeiffer, 2012, p.3).

Nevertheless, teachers at Da Vinci's School appeared to be more eager to acknowledge and promote talents in music, dance and art. They were however notably reluctant to recognise any gifts in academic areas. This artificial distinction between creative talented and academically gifted has been reported by several researchers who observed that teachers although reluctant to offer special educational opportunities for intellectually gifted pupils, they did not object to similar opportunities being offered to pupils with talents in sports or music (Geake & Gross, 2008). As Geake and Gross (2008) argued, this attitude can be attributed to the fact that:

> *'outstanding ability in sport or the performing arts is seen as a form of "social compliance" in that the talent is being developed for the enjoyment of the community, [while] development of high intellectual ability is seen as a selfish endeavour—social noncompliance—as it is the possessor of the talent himself or herself who will primarily benefit (Gross, 2001). High intellectual ability is generally viewed by the community as a passport to higher education; prestigious, lucrative employment; and a desirable lifestyle.' (p.218).*

Very interesting was the fact that all teachers seemed to share the same opinion on this matter, while in other schools, teacher's opinions were not unanimous. Some teachers in this school spoke a little sarcastically of their class's 'recognised genius' and their state school colleagues who grouped pupils by ability. Moreover, despite the fact that these teachers endorsed the concept of 'the individual child', it was frequently hinted that standing out from the rest of the class as being extremely gifted is something undesirable. For example, talking about a 'very bright' pupil in his class (who had also been accelerated, i.e. she was allocated to the next year group when she was first registered at the school), a teacher commented that although she is perfect at pretty much everything that she does, 'she does not stand out […], she belongs'. The latter point might result from the disagreeable stereotypic view of gifted students as 'arrogant, overconfident, and self-centered' (Geake & Gross, 2008, p.218).

7.1 Terminology, Definitions, Key Characteristics

Teachers in Scotland did not talk about pupils' talents in non-academic areas at all, while all teachers in England showed an interest towards the promotion of their pupils' talents in sports, music, dance etc. Interestingly, teachers from Da Vinci's school, who offered their pupils numerous extra-curricular opportunities (in arts, drama, handwork etc.) when asked to discuss about their gifted and talented pupils they did not speak of their musically/artistically talented pupils either. Instead, they assumed that when I referred to gifts and talents I had only academic giftedness in mind and as it was mentioned above, they rejected this notion.

Even teachers who initially used the term 'gifted and talented' were uncomfortable with the use of this term and as the discussion progressed they tended to use alternative ones. When asked to explain this, one teacher said: 'Well, we use

this term, only because across the school that's what we… we are led to believe that you look at special needs children, you look at gifted and talented, and provision is important for both kinds of pupils.' Another teacher, despite originally using the term 'gifted and talented', proceeded using the term 'more able' only to switch to the term 'top group' later. When asked to account for the use of this term she said: 'You try to… I guess if you want to be politically correct, you want to use the term 'top, middle, bottom' and just between ourselves, we can say 'more able''. It should be noted here again that I did not try to enforce any terms on the teachers, since one of the first questions I asked them was 'what terms do you use to refer to the group of pupils I am interested in' and further elaborated when needed. Thus, depending on their answers, I used the terminology chosen by my participants for the remaining of our interview/conversations. Therefore their uneasiness discussing about these pupils should not be associated with any presumed nervousness towards me. Instead, uneasiness discussing about gifted or 'more able' pupils has been often associated with a fear of elitism in the relevant literature. As it has been previously mentioned it has been argued that some teachers feel that by talking of academically gifted pupils they draw distinctions 'between superiority and inferiority in academic, political, or social domains' (McCoach & Siegle, 2007, p.246). Such fears of elitism make educators feel uncomfortable conversing about and providing support to those who are 'already privileged' (ibid.) under a 'flawed, but seductive, assumption that intellectual giftedness guarantees social and economic success' (Gross, 1999, p.92).

Most teachers acknowledged a difference between the more able and the gifted pupils, both in terms of their characteristics and needs. They stated that more able pupils would easily fit in the normal classroom and their needs could certainly be met by the teacher, while gifted pupils would be bored and their needs could hardly be met in the mainstream class setting. It was thus quite fortunate that, as most teachers concluded at the end of such statements, they did not have any gifted pupils in their class. For example, a teacher from St Hermylus's RC, P2, when asked to explain in what terms gifted were different from more able pupils, argued:

> *'I think gifted pupils are extremely talented, more than just being smart and their talents are more unusual and perhaps*

> *this means that they might struggle in the normal classroom routine, you know, they may struggle following routine because they get so bored so easily, whereas your more able pupils I'd say possibly might be more focused academically, wanting to please you, whereas your gifted are so far above that they need a lot more extension tasks and perhaps don't fit into the normal classroom, in some respects. I don't think I have any anyway, but that's how I have differentiated between the two groups'. (St Hermylus's RC, Interview with P2 teacher).*

What is remarkable here is that although this teacher's comments about the difference between more able and gifted pupils are in contrast to research findings which indicate that teachers tend to (falsely) identify as gifted the so-called 'teacher pleasers', i.e. those pupils who conform to their idea of the successful learner, that is motivated, hard-working and high-achieving (Schack & Starko, 1990), she simultaneously disregards the possibility of her having any gifted pupils in her class without further elaborating on the matter. At this point it is also important to point out that first of all, teachers were not asked to detail any differences between 'gifted' and 'more able', unless they differentiated these terms while discussing about them. In addition, it is quite interesting that in the quotation cited above, the teacher (and indeed several teachers from this school) used both the term 'gifted' and 'more able' to refer to a more exceptional and rare example of able pupil on one case and a more 'common' type of academically able pupil on the latter. This is quite intriguing as the Local Authority where this school is located has abandoned the use of the term 'gifted' and refers to these pupils (e.g. in policies) as 'highly able pupils' (Sutherland & Stack, n.d.).

It was also argued by some teachers that gifted and more able pupils differed in terms of their personality too. The quite stereotypic view that gifted pupils lack social skills was openly expressed by a number of teachers from both English and Scottish schools. One teacher in particular when asked to explain the (perceived) difference between gifted and more able pupils argued that:

> *'[They are] a little bit socially awkward, don't mix very well, a bit condescending towards some of their peers who don't understand what they do. Definitely a different personality type, while I think the more able pupils here, I think their*

> *personality types are like a generic boy, a generic girl. They are not very different. So there's definitely a difference between more able and gifted.' (St Hermylus's RC, Interview with P7 teacher)*

This view that gifted pupils have social difficulties was not only widely held by participants in this study but has also been adopted by some empirical researchers (e.g. Peterson, 2009). However, Neihart's (1999) comprehensive review of the relevant literature concluded that gifted and talented 'are a diverse group when it comes to social competence' (p.13) and that 'whether gifted students have the social skills necessary to cope with the demands in their lives appears to depend on additional factors such as their specific domain of talent, their degree of giftedness, and their self-perceptions or other personal characteristics' (p.15). Similarly, other researchers have argued that when gifted individuals demonstrate emotional difficulties, these are more likely to result from a mismatch between their abilities and the learning opportunities they are offered (Porter, 2012), from unrealistic parental or teacher expectations, from a peer environment which is hostile to a hard work ethic or from gifted pupils' perfectionism (Pfeiffer & Stocking, 2000), rather than by an innate psychological trait of giftedness. Therefore, as Persson (2007) pointed out, 'emotional problems are very real for the highly gifted, but they are not qualitatively different from anyone who is not gifted, nor are they in most cases prompted by some pervasive psychological disorder' (p.31).

Even in the schools from England, where the term 'gifted and talented' had been recurrently used in policies, Ofsted reports etc. and despite the fact that these schools kept a register of their 'gifted and talented' and reported about the ways they provided for them on their self-assessment reports, teachers seemed to be doubtful about the existence of such pupils in their class or even the accuracy of the term. The following statements better illustrate this: 'Well, there was a difference between what people thought a gifted and talented child was, so we've kind of gone away from the gifted and talented towards the more able child. Otherwise people would say they don't have any gifted and talented children in class' (St Achillas's RC, Year 5 teacher). 'I think the term 'gifted and talented' is quite restrictive. More able is broader and more realistic. I think IF you've got any gifted and talented children, then they are gifted

and talented against other schools. Whereas I think, the more able children…, it all just depends on the cohort and what school you're comparing against' (St Achillas's RC, specialist teacher). These statements reflect the often embraced myth that 'no one is gifted' or that giftedness is extremely rare, which to an extent accounts for a lack of specific measures for the identification and provision of the needs of these pupils observed in some schools (Porter, 2006).

Similarly some teachers were quite evasive if not misleading when asked about the ways they provided for their gifted and talented and only when they were further prompted did they admit that they do not have any gifted and talented pupils in their class. Such an example is my dialogue with St Giovanni's gifted and talented coordinator:

> *'She: SAY I've got two gifted and talented registered in this class, but they are part of my higher ability group, so I WILL be sure that yes, I do have planned challenges for my highest ability children within that group, which will be representative sample of the gifted and talented, but it isn't restricted to the few who are actually on the register. That's just a way of monitoring really.*
>
> *Me: So, do you have any gifted and talented pupils in your class at the moment?*
>
> *She: eh, no.' (St Giovanni's RC, Interview with Year 5 teacher)*

Teachers in Scotland were much more evasive and uncertain of what constitutes a gifted and talented child than teachers in England. Even though the head teachers in these schools argued they were implementing policies to meet the needs of their gifted and talented, some teachers were unable to explain what they defined as gifted and talented/ more able/ highly able and constantly evaded my questions. The following dialogue illustrates the difficulty I had engaging teachers in a conversation about gifted and talented and prompting them to explain to me the terms they used:

> *'Me: How do you describe the pupils I am interested in?*
>
> *She: I don't know…More able?*
>
> *Me: And how do you define them?*
>
> *She: Well, I will tell you…To be honest, I don't know what we define as an 'able pupil'.*

Me: Ok, how would YOU define them?

She: Well, look, as a teacher, I'd look at the pupil's effort. For example, if I come across a less able pupil who tries a lot, but cannot succeed, doesn't manage to finish his task, I will appreciate his effort. […]

Me: I see…But this is a less able pupil, as you put it. What would you define as a 'more able pupil' then?

She: More able? The one who follows the school rules, I think, the one who pays attention and is willing to help…That is actually hard to say, because I don't think it only has to do with academic skills. Now, if you ask me who I think a 'clever' pupil is, I think it is different from the 'able/good' pupil. I don't know if I'm clear…

Me: No, I understand that that's two different things for you. So what is a 'clever' pupil for you?

She: Ok, good question. I am not sure what the criteria to judge this are. Good question, I like it. It needs some thinking…

Me: Take your time…

She: Well, I think it is…I don't know how to put it. I don't know what the criteria are. Because I have so many different children in mind….

Me: Ok think of some of your 'clever' pupils and tell me what characteristics you think they have.

She: Well then, they are focused on what they do, compared to the others. It's as if they are always one step ahead of the class, as if their mind is really sharp with what they do. I don't count in their behaviour, because every child functions in a different way, but it's as if […] they are one step ahead. But not because someone has told them the answers, but because their mind is sharper.' (Macbeth Primary, Interview with P4 teacher)

However, even teachers in England who might originally appear more confident in their use of terminology, when further prompted to explain the identification procedures they followed, they became rather vague and admitted they were confused about the whole issue. The deputy head teacher and gifted and talented coordinator of St Achillas's RC for example, despite initially arguing that the school has vigorous policies for the identification and provision of gifted and talented pupils' needs, when asked to specify what their identification procedure is, answered that:

> *'I think that's a tricky one, you know, to find out who….It's difficult because you sometimes think, what is gifted and talented? So I'm thinking, this is a personal thing, it's a bit of a grey area, because, what I might see as gifted and talented, someone else might not.' (St Achillas's RC, Interview with deputy head teacher).*

In reading this statement, a more severe reader might question this deputy head teacher's professionalism in expressing her unawareness in the matter so light-heartedly, even more so because in her additional role as the school's gifted and talented coordinator it is her duty to advise her colleagues on how to identify and provide for these pupils. This response can also be related to the argument raised in the discussion of teachers' role (Chapter 1) that teacher nominations of gifted and talented pupils can be more reliable if teachers have the relevant training required (Carman, 2011).

Finally, there were several instances when teachers disclosed their inner doubts about the existence of gifted and talented pupils while criticising the policy requirement to identify a given percentage of their pupils as 'gifted and talented'. For example, St Giovanni's RC deputy head teacher argued that each class is expected to identify

> *'the top 20% of the children who are working at the highest level at the minute in the class, or are in the top ability band. BUT I might not necessarily say that I think they are particularly talented, but they are the children we are expected to cater for in school. So, we automatically just look for the top 20% of the children. But they rather are the more able children, I prefer to use the term 'more able children'. You don't really often come across, in my opinion, children in primary school who are particularly talented, unless some children with autism I would say are particularly gifted…But we are still expected to identify the top 20% of the class and that is what we do.' (St Giovanni's RC, Interview with deputy head teacher).*

The latter comment also indicates a tendency to recognise or accept giftedness only in autism. It has indeed been mentioned in Chapter 1 that among those pupils who could be categorised as gifted there is a subgroup with learning difficulties, such as autism ('twice-exceptional pupils'). However, as it was discussed on a previous

paragraph and as Assouline and her colleagues (2009) argued, 'When highly gifted students have co-occurring social difficulties, it is critical to determine […] whether the aetiology of the social isolation is more a consequence of a mismatch between high cognitive ability and an under-stimulating academic environment, or more likely an impairment that is internally based and the result of a disability' (Assouline, Nicpon & Doobay, 2009, p.103) (such as Autism Spectrum Disorder). Teachers should therefore be careful not to immediately attribute a very able pupil's social difficulties to autism but determine first whether they result from an unchallenging learning environment which disregards their advanced learning needs.

A more detailed discussion about the identification processes adopted in the schools studied will take place later in this chapter. In the following paragraphs the participant teacher's opinions relating to the nature of ability will be analysed.

7.2 Nature of ability

An important aspect of the ways teachers perceive the concept of giftedness is their beliefs about its nature and whether it derives mainly from nature or it is a result of effort and of the environment a child grows up in. As was discussed in Chapter 1, there is no consensus about the degree to which giftedness comes from nature and/or nurture. However, a considerable number of researchers and gifted and talented educators agree that gifted pupils have high (natural) potential and can only flourish if this potential is meticulously nurtured (Feldhusen, 2005; Makel et al., 2015; Mönks & Katzko, 2005).

Surprisingly, the great majority of participants in this study argued that giftedness or 'high ability' is not a result of the combination of nature and nurture' but it mainly results from nurture. For example, as a teacher from St Hermylus's RC argued:

> *'I think it is predominately nurture. I think there is a little bit of nature in there, like the genetics you are born with, but I think predominately, 95%, it is nurture and I think all children are able to succeed, it is about whether you provide them with the avenues that make that learning accessible to them, both the more able, the lower able, everyone, I think mostly it has*

> *to do with nurture and how they learn and how they are brought up, rather than the genes that they are born with.' (St Hermylus's RC, Interview with P1a teacher).*

It would perhaps be hard for these teachers who argued that nature has a very minor impact on ability to account for the vast differences among their pupils' abilities, when one of the key actors of 'nurture', i.e. school, is the same for all of them. It might be even harder to explain why some pupils identified as 'low ability' hardly ever managed to reach the levels attained by their more able peers, despite receiving additional support from Teaching Assistants and Learning Assistants.

However, most teachers who argued that ability results from 'nurture' mainly, argued that home support is the most important factor too and that could be a viable argument for the differences between pupils. Nevertheless, it seems quite ironic that teachers should place the highest value not on their work but rather on the ways parents support their children's learning. Indeed most teachers, even those who put more emphasis on the effects of nature, highlighted the impact that a supportive home environment has on children. For example, as a teacher argued:

> *'[More able pupils] are usually getting input at home. So even when I send home pieces of work to engage with their parents, tends to be the parents who are more engaged and supportive of their children that they come in with a better understanding of early phonics, early literacy and our number work as well. […]If they are not going to consolidate at home, they are not going to be pushed they are not going to be challenged, not going to be extended. Nurture doesn't just come from school, it comes from home too.' (St Hermylus's RC, Interview with P1a teacher).*

It is quite surprising that as the above statement indicates, some teachers seem to regard the role of parents in educating their children as equally or even more important than school in the case of more able pupils. According to the teacher cited above, it is parents who are expected to 'push', 'challenge' and 'extend' their gifted children rather than school. Similar findings have been reported by Moon and Brighton (2008) who found that teachers 'believed that the most important factors contributing to students being recognized as gifted come from exposure to stimulating events at home or from their parents' (p.457). As these researchers remarked, such 'pervasive

beliefs seem to most significantly disadvantage students from poverty and those students whose first language is not English' (Moon & Brighton, 2008, p.473).

Other teachers, especially those teaching junior classes argued that those pupils identified as more able are usually the ones who have been to a nursery from early on. For example, as the following teacher claimed:

> *'A lot of the more able pupils actually, when you dig a little deeper is you find that they've been to a nursery. They are going to nursery from at least the age of three. And this just kind of proves what I've just been saying about the importance of nurturing children's gifts.' (St Hermylus's RC, Interview with P1C teacher).*

Although the above statement is quite valuable in the sense that it shows that children who have spent more time in formal or informal education are considered as more successful at school, it does not necessarily signify that these pupils are 'gifted' or 'very able'. It only indicates the value of nurturing pupils from a young age. However, research on preschool education has found that economically disadvantaged families are less likely to provide their children with rich learning experiences (e.g. enrolment in early education programmes) and consequently these children miss the opportunity to develop their cognitive and language skills from early on. They thus 'enter school with fewer academic skills than their more advantaged peers, and substantial gaps in cognitive and academic competencies persist in later school years' (Magnuson, Meyers, Ruhm & Waldfogel, 2004, p.117). In view of these arguments, the above statement intensifies the concern that teachers tend to miss(identify) those gifted pupils from economically disadvantaged or cultural minority backgrounds who have not had the home support and early opportunities to nurture their talents (Moon & Brighton, 2008).

In some rather extreme cases, teachers who advocated for nurture over nature, even argued that when they assess their pupils, they assess their effort rather than their skills. For example, as a teacher from School 2 stated:

> *'Well, look, I am a teacher, so as such, what I am looking at is the pupil's effort. For example, if I come across a low ability pupil who tries a lot, but struggles to succeed, doesn't manage*

> *to finish his sums on time, this doesn't mean that… I will actually appreciate his effort. And I think that this is even more important than being able to do a sum. And also, I think… that he has the potential to improve as opposed to someone else who has the skills but isn't interested in what I say, like Lena for example, who says 'I don't want to do it' and doesn't event try to. So a child who does his best to follow what we do in class should get a better reward than someone who does the absolute minimum.' (Macbeth Primary, Interview with P4 teacher).*

There are several possible implications from a statement such as the above. To begin with, the fact that a child is not interested in what they do in class, but is able to succeed in the tasks assigned might indicate that they are not challenged enough in class and should perhaps be given alternative work which might interest them more. Furthermore, as it was discussed in the previous section of this chapter, if teachers commit the common fallacy to base their judgements of pupils on their behaviour in class, there is a high risk of misidentifying 'difficult' pupils as incompetent and well-behaved pupils or 'teacher pleasers' as they are often termed in relevant literature, as 'very able'. Indeed, as several researchers have pointed out, often gifted pupils who are not provided with meaningful learning opportunities can become bored, lose interest in learning and develop disruptive behaviour (George, 2013; Betts & Neihart, 1988; McBride, 1992; Stein & Poole, 1997). Finally, without trying to undermine the importance of effort, teachers should equally emphasise that one of the most desired outcomes of effort is the attainment of skills (thinking, mathematical, practical skills etc.) and assess them accordingly.

The second most-popular view about the origins of high ability or giftedness was that it is a result of both nature and nurture. For example as a teacher from St Hermylus's RC stated:

> *'I think it's a mixture of the two. Leo for example is a very bright child and he clearly comes from a very bright family, but they do a lot in the house, there's a lot of encyclopaedias and reading, this sort of thing, and they do lots of trips so that has definitely been nurtured in him. And then I look at another one, one of the wee girls. She is again very, very bright, again from a very supportive home, but they do not do the same amount of work, you know, and she is still doing really well.*

> *So, I think it is definitely a nature thing, but you can nurture it even further.' (St Hermylus's RC, Interview with Year 2 teacher)*

This statement clarifies to an extent the view that nature and nurture are equally significant factors in the question of the origins of (high) ability and agrees with relevant research findings that "intelligence is 50 per cent 'heritable'" (Ritchie, 2015, p.66). However, it additionally demonstrates that when some teachers discuss about the nurturing of pupils' skills and talents beyond the so-called 'average' or 'middle-ground', they tend to refer to the cultivation of these skills at home rather than at school.

Moreover, other teachers despite sharing a similar view that nature and nurture play equally important role in shaping a pupil's abilities, were quite uncomfortable speaking about different levels of abilities (especially the 'middle ground' and 'lower achievers') and even more uneasy when they referred to the impact of nature. Illustrative of this is the following statement:

> *'Eh, you know, (speaking in a lower voice), our, our middle ground, my lessons are kind of targeted to them. So my maths lessons, I focus throughout the week on my middle ground, and pay attention to the high achievers and the, you know…, the lower achievers. […] So it is just getting them to understand that learning is flexible, learning is different for everyone, you know, our minds work in different ways. Eh…, we have a dialogue about how some people are better at some things than other. Sometimes there are things that people are always going to be better at than others, but learning takes practice. You know, I beg on emphasising the practice element of learning. I mean, [almost whispering now] I guess you get to think about genetics and is it hereditary? I think you can think about practice too. A lot of my very able children are very motivated to learn, they are the children that complete their homework, they are the children whose parents have high aspirations for their learning… That's not to say the low attainers don't. You know, some of my low attainers work really hard. They just have got something not quite there…' (Macbeth Primary, Interview with P7 teacher).*

It was mainly teachers from the two Scottish schools and the independent school who felt uncomfortable speaking of different abilities and especially about the role of nature in shaping them. As is rather evident from the above statement, any

references to the impact of nature (e.g. 'genetics', 'hereditary' etc.) were rather oblique, while references to the effects of practice were more overt and extensive. This can be attributed to the fact that intelligence is still considered very controversial. As Ritchie (2015) argued, 'the greatest discomfort occurs when genetics is mentioned' because people falsely believe that 'if genes are responsible for differences in IQ' then IQ is immutable and the significance of effort is minimal (p.107). At the root of this problem, as Ritchie (2015) further claimed is the misunderstanding that genes 'explain 100 per cent of IQ differences, and [that] the environment [does not have] a substantial role' (p.108).

A significantly lower number of teachers supported the view that giftedness was mainly- but not exclusively- a result of nature. Teachers who supported this view referred to maths or music as typical examples of natural talents. For example a teacher from St Achillas's RC mentioned that:

> *'I think most of it has to be nature. Especially gifted and talented in maths. Because I think maths is a very logical subject, you have to have the logical breeding of being able to work it out and work through it. But having supportive parents who do a lot of work with them at home is also quite important. So, I think you need some sort of basic ability there anyway, which can then be built upon.' (St Achillas's RC, Interview with specialist teacher)*

A similar view was held by the teacher who participated in the following dialogue with me:

> *She: 'I think the first factor is, please don't take me wrong, but I think it's first of all … genetic.'*
>
> *Me: 'Why should I take you wrongly?'*
>
> *She: 'No, I'm just saying, I think they are just born this way. With let's say a predisposition to, I don't know, to be very good at a specific area, say maths for example. But I think the environment is important too. That is, if you don't nurture this natural predisposition, I don't think you can make any progress. Eh yes, basically this.' (Macbeth Primary, Interview with P4 teacher)*

This example highlights the extent to which teachers (have been made to) feel uncomfortable when discussing about (high) ability and shows a considerable degree

of hesitation in disclosing their belief that it might be partly a hereditary gift. This hesitation or even embarrassment to refer to 'natural predispositions' could arguably be at the core of the problem why many teachers avoided engaging with the discussion of gifts and talents and discussed about low ability or behaviour in class instead.

7.3 Identification

When teachers were asked about the ways they identified their gifted and talented they mostly described the process they followed in order to allocate their pupils to ability groups or sets. Despite the fact that the interviews always started with a discussion over the terminology and definition of gifted and talented, when the question of identification occurred, it almost certainly shifted to a discussion about ability grouping. The same also happened with questions about the ways the school/class provided for the gifted and talented pupils. Teachers from all schools except for Da Vinci's School described the ways they assessed their pupils' 'abilities' in order to set or group them. And that was what it appeared provision for the gifted and talented was limited to. I will discuss the grouping and setting strategies followed by teachers more extensively on Chapter 11.

Most teachers also reported that they kept a register of their 'gifted and talented' or 'more able' pupils, as their school or Local Authority expected them to do, but it was mainly seen as a formality rather than a process which could enable them to improve provision for them. For example, a teacher from Macbeth Primary who had refused to acknowledge the existence of a group of pupils who could be described as 'gifted and talented' or 'more able', when asked about keeping a register of these pupils, astonishingly, she said they did, based however on their own judgement and that they were expected to share this register with the administration of the school:

> *'Yes, we've got our support for learning register and we're expected to record our 3 most and less able pupils. But it's really based on your own judgement, so it's teacher feedback, what you've done in the class assessment…' (Macbeth Primary, Interview with P7 teacher).*

Similarly, on my question on how they decided who should be included in the register, St Giovanni's RC teacher's response that: 'Mrs W. has the register and now

we just pick a couple of children from the class who are outstanding in an area' indicated that the identification of the more able pupils is a very informal process too. These responses raise concerns about the ways national or local authorities are implemented. It could for example be surmised that these teachers complied with the requirement to keep a register of their gifted and talented pupils only perfunctorily, while in fact retaining their doubts about the expediency of this process and remaining confused about the concept of giftedness. Similar findings have been reported by Koshy and Pinheiro-Torres (2013) who argued that teachers felt obliged to use the terminology and processes requested by government policy, but felt uncertain and uncomfortable selecting an amount of pupils as gifted and talented.

Some teachers from schools in England described the identification process more explicitly and expressed their concerns about its rigour and effectiveness. As a teacher from St Giovanni's RC argued:

> *'…if you had […] pupils who seemed outstanding across the board, then you might pick them. Which is just the way we are required to do it now, to identify them. But I don't, I don't feel that serves the children. Because, you see, I could pick Maria for maths and she is good in literacy now. At the beginning of the year she wasn't. So it just changes so much'. (St Giovanni's RC, Interview with Year 2 teacher)*

This statement indicates the teacher's belief that giftedness is not stable, but can change with time or effort, which agrees with Reis and Renzulli's (2009) argument that 'giftedness is not a state of being, it is not fixed, and it does not reside in a chosen few over their lifetimes as a fixed entity. It is, rather, developmental—in some children and adults with high potential, at certain times, under certain circumstances, and with appropriate levels of support, time, effort, and personal investments and choices' (p.235). What is more, this teacher's comment about the identification procedure adopted in her school reveals her concern that the inflexibility of the process may potentially lead to a failure to identify some gifted and talented pupils.

Revealing of the difficulties associated with the identification of the gifted and talented pupils and more specifically of teachers' lack of knowledge of rigorous ways

to identify them is the response of St Giovanni's RC gifted and talented coordinator about the criteria they use to identify their gifted and talented pupils:

> *'She: …The academic side, we take it from our own tracking system. The tracking system identifies these children who are…, who have achieved higher than average and they go up to the next year group…*
>
> *Me:…with tests?*
>
> *She: Well, teacher's assessment. Tests are done, but there's teachers' assessments and observation, assessment, class work and then the levels at the end of each term, they go up to the next teacher. That's just our own tracking system to see who is above average. Eh…, and usually they are…they are sort of candidates for the Gifted and Talented, but they are too many? And we can't…When I first took it over, we had a policy to spot all the highest ability children on the register. And the register…, there were far too many there. So we had to sort of say…, look these are the higher ability, BUT some of them have sort of a natural flair, just that extra sort of something that you don't quite have plain evidence of, it's just something that you know when you look at them and they've got that extra flair, they can turn their hands on things. That's the kind of child who would be registered.'*

This teacher indicated that various sources of information should be used to identify gifted and talented pupils, such as tests, teacher observations and class work, which is in line with what most gifted and talented educators in favour of a 'child-responsive model of giftedness' suggest (Callahan & Miller, 2005) and what the IQS propose. However, although indicating a number of sources of information that teachers use to identify their gifted and talented pupils, this teacher (as most participants in this study) failed to explain the criteria they use to base their decisions on. Moreover, the latter part of this response, illustrates again a certain degree of vagueness about what distinguishes a gifted and talented pupil from other pupils and it is even more interesting that this response came from the person who would be expected to be the best-informed about the topic in this school. Similar findings have been reported by various researchers; for example Schroth and Helfer (2008) reported that 'regardless of [identification] method, the traits that characterize a gifted child and the most appropriate means of identifying and assessing these traits are not uniformly clear to those working in the schools' (p.169).

A thought-provoking finding of this study is that Da Vinci's School, the independent school of my sample, did not follow any identification procedure of pupils' abilities. The teachers repeatedly argued that there was no point in doing that, since they were very well acquainted with their pupils and did not group them by ability. Yet, organising pupils in mixed ability groups does not necessarily mean that teachers should not have a rigorous approach to enable them to identify their pupils' strengths and weaknesses in order to tailor instruction to their needs. However, interviews with teachers indicated an absence of such an approach:

> *'Well, our classes are quite small, you know. And we've got the same class for so long…So, naturally, we know which ones of them are best at each topic, but, even so, you know, I've got Helen who is very strong in some ways in maths, but in terms of visualising what is going on, in terms of going up the track a bit…, she's quite stuck a bit. That's ok, that's where she is, so eh, I don't need to plan an intervention for her.' (Da Vinci's School, Interview with Year 5 teacher).*

Moreover, the school's admission procedure is very different to the ones followed in most independent schools. As one teacher emphasised 'In contrast to other independent schools, our admissions procedure means we welcome pupils of all academic abilities and value them for what they bring to the school community. We do not hold academic entrance exams but interview prospective students.' This school's attitude towards abilities and identification procedures further signifies their belief that all pupils are gifted and their supposed differences are only a matter of when each of them realises his/her potential. In that light, the fact that the school employed teaching assistants who exclusively supported pupils with learning difficulties is somewhat self-contradictory.

In the two schools of my sample where pupils were set for maths (St Hermylus's and St Achillas's RC), the identification procedure was ostensibly more formal and less flexible. Pupils were tested towards the end of the school year and based mainly on this assessment as well as teachers' observations and previous assessments were set for the next academic year. Both English schools, (of which one was setting and the other grouping pupils within class) used SATs and QCAs ('an

optional SAT') to assess their pupils' levels and decide how to group them. As a teacher from St Giovanni's RC explained,

> *'the idea is that we give all children these tests and we take the marks from there and translate them to levels. I mean, obviously we are not using levels any more, but with it being the first year without levels, it's been handed to keep track.' (St Giovanni's RC, Interview with Year 3 teacher).*

Nevertheless, it could be argued that the purpose of this procedure is to select those pupils suitable for each set/ability group. Those allocated on the top sets should not directly be considered as gifted and talented and vice versa. This is more apparent in the case of St Hermylus's RC, where cross-age setting was employed. A P7 pupil allocated to the top set should not be viewed in the same way as a P6 pupil allocated to the same set. Following such a simplistic identification approach, with much reliance on test scores might easily lead to misidentification of gifted underachievers and their consequent allocation to the bottom sets. Similar observations have been made by White (2006) 'that pupils are selected on the basis of their current attainment rather than their natural ability. Consequently, those identified are not necessarily the true 'gifted' students, as middle class parents are able to coach their children to 'act' as high achievers' (in Koshy & Pinheiro-Torres, 2013, p.961).

On the other hand, the deputy head teacher and gifted and talented coordinator of St Achillas's RC, despite the fact that the school employed a formal assessment process for the allocation of pupils in sets, when asked whether the school had a formal procedure to identify the gifted and talented pupils was quite evasive and vague. As she replied: 'I think that's a bit hard to answer […] given that gifted is such a foggy area. However, I suppose if you've got a group of teachers together, hopefully they would know in their class who are the gifted and talented children.' It is possible therefore to conclude that the deputy head did not confuse the process for the allocation of pupils in sets with a process for the identification of the gifted and talented as the rest of the participants from this school did. However, she was not very informed about the ways they should be identified either, despite the fact that the school kept a record of those pupils as required and hoped that teachers would intuitively be able to recognise these pupils.

7.4 Labelling

The most interesting finding regarding labelling, that is the assignment of a specific label to groups of pupils based on their achievement or perceived ability, was that all schools with the exception of School 5, whether acknowledging it or not, labelled their pupils either implicitly or explicitly. What is more, most pupils were aware of the way they were categorised and of the level of work they were expected to be able to succeed to. Teachers in Scotland were very openly against the labelling of their pupils as 'able' or 'less able'. Nevertheless, all of them used alternative labels which sent the same message to their pupils. For example, in St Hermylus's RC pupils were allocated to ability groups for literacy and different colours were used as labels for their groups. When however, they were given a written assignment, their sheet was labelled as 'Curriculum for Excellence First Level 4-6' or 'CfE Second Level 1-3'. Similarly, in Macbeth Primary P2, the teacher grouped her class by ability for numeracy and literacy and used names of fruits and shapes as labels for the tables. The tasks, however, that pupils were asked to work on were labelled as 'Chilli Challenge' 1,2 or 3 and it was always the same group that was asked to work on the hardest Challenges. The teacher specifically asked the rest of the class not to work on the 3d Chilli Challenge if they were not a 'circle' (top group). The latter is also an interesting example of how contradictory the teacher's earlier statement to me that 'I don't. It is no use.[…] Labels kill pupils' motivation and put a ceiling to their learning' is to her day-to-day practice, when whether consciously or unconsciously, she did in fact label her pupils and put a ceiling to those pupils' learning who were not considered able enough to manage the 3d challenge.

On the other hand, teachers in England were under no illusion that pupils were not able to decode what their label stood for. Despite using neutral labels most of the time, they were aware that pupils understood the ways they were grouped. As one teacher argued:

> *'I use colours, I mean, there's no numbers or anything and I try to keep it secret, because I don't think they need to know. It's just to help me with my planning really, but they do pick up on it.' (St Achillas's RC, Interview with Year 5 teacher).*

There were also cases where teachers were quite explicit in their characterisations of pupils' abilities. This however was more common in English schools. For example, when observing a maths lesson in St Giovanni's RC, Year 2, the teacher announces that she is sending over to me 'two particularly able boys in maths from the lions', because as she plainly states to the class 'Miss Esther is interested in pupils who do very well in maths. So you can show off to her today!' At another instance, a Year 4 teacher from the same school, instructed her class as follows:

> *'I want everyone to continue from where you were left on the division sheet I gave you last time, except for you perfect table (pointing towards the top group in maths). You are going to move to the most challenging bit straight away!'. (St Giovanni's RC, Observation from Year 4)*

Da Vinci's School was categorically against labelling and any form of separation of pupils into groups. As a teacher argued,

> *'So once you start separating them into labels, then you can actually kill the motivation, because sometimes it just comes later. Sometimes somebody is really poor at maths when they are younger and something clicks in and later they are fine. So if you stick them in a group when they're younger and say you are in a less able group, then that's a very powerful message for the child and they'll probably believe you, that they are not able at maths, so we try not to have a label.' (School 5, Interview with Year 3 teacher).*

Some of the thoughts that arise from this statement are the following. First of all, this teacher believes that ability is not something that you either have or have not. As she explains, someone may be bad at maths at some point and later improve. However, she appears to be unable to reconcile her belief that abilities develop over time with the concept of giftedness and therefore assumes that if someone is identified/labelled as gifted, he/she stays gifted forever and vice versa. Similar views have been reported in the relevant literature (e.g. Borland, 2005). Nevertheless, numerous gifted and talented educators have adopted a developmental perspective of giftedness, arguing that depending on several factors (e.g. pupil's motivation, environmental stimuli, support from school and home etc.), pupils may develop their gifts and talents at several points of their development (Feldman, 2013; Gagné, 2010;

Subotnik, 2003). Secondly, this argument highlights (most) teachers' concern about the effects of labelling on pupils' motivation and socio-emotional development. Indeed it has been often argued that if someone's label as 'gifted' or 'not gifted' has negative connotations to the child or others, then negative behaviours may be demonstrated causing social and emotional consequences, which in turn can affect children's performance in school (Gates, 2010). Given that it is possible that these labels are inaccurate, due to teacher biases or pupil underachievement, these effects intensify. Valuable as this response was in highlighting the consequences of labelling, it should be noted that it was an answer to my question whether they had any procedure at school to identify their more able/gifted learners. Instead of explaining why they do not think identifying gifted pupils is useful, this teacher explained why they are against labelling them. Moreover, she did not clarify how it is possible to reconcile the fact that they do identify pupils as having learning difficulties and assign them labels such as 'low ability' with the arguments raised about labels.

On another occasion however, the way a teacher labelled her groups when they were doing a competitive activity as well as her discussion with me about it later, indicates a sort of hostility towards the most able pupils of the class. To be specific, during a maths lesson the teacher grouped her pupils by ability and labelled the top group 'bright foxes'. In the end of the lesson however, the 'bright foxes' had not managed to complete their task successfully (the other groups hadn't either) and as the teacher argued:

> *'the bright foxes didn't manage to do good team work, because they didn't work together. The 'ants' [i.e. the less able group] though worked together and even if the way they worked wasn't the most effective, they at least had a sum in the end!' (Da Vinci's School, Interview with Year 2 teacher)*

The same was argued explicitly to the rest of the class at the end of the lesson with some self-gratification on the teacher's behalf. She scolded the 'bright foxes' arguing that they

> *'were certainly able to solve the puzzle but didn't succeed to, because [they] didn't work as a team, while the other groups working from a more disadvantaged position had better*

> *results, because they collaborated'. (Da Vinci's School, Observation from Year 2).*

7.5 Assessment

Assessment was a very important procedure in all schools. However, it had many different aspects and schools used it in various ways for different purposes each. Assessment could be divided into assessment *of* the school and assessment *for* the school. The former could be described as an assessment of how well the school 'performs' compared to other schools or based on targets set by an external to the school body, such as Ofsted or the Local Authority. Assessment for the school could be described as the process followed by teachers to allow them to plan their teaching, allocate pupils in ability groups, evaluate individual pupils' progress etc.

In all state schools observed the 'assessment of the school' determined to a very large extent each class's daily activities. For example, St Hermylus's RC results in standardised assessments of maths were quite low. Therefore, as the P7 teacher informed me, the Local Authority identified numeracy as an area which the school (as well as most schools in the LA) had to improve on. As a result, the school working in partnership with an LA official set maths as their priority and decided to introduce setting after P3. Similarly, according to the P7 teacher of School 2, as pupils progress through the primary school, daily assessments become part of their daily routine in order to help them reach the targets set by the Curriculum for Excellence and therefore raise their achievement in the 'Progress in English' (PiE) and 'Progress in Maths' (PiM) tests. Surprisingly, although national tests' results are not published in Scotland (as is the case in England with league tables), Wiggins and Tymms (2002) reported that Scottish primary schools 'appeared to be under greater pressure than English ones' to meet their targets (p.44). Nevertheless, in my case studies the 'assessment of' the school seemed to exert more pressure in English schools. This could perhaps be attributed to the character of the Inspectorate in Scotland. As Ozga and her colleagues observed:

> *'The Inspectorate thus has a very important role to play […] through their use of judgement, evidence and the building of trust through self-evaluation which they propagate as a key resource for better public sector management and*

> *accountability, while they model and "teach" self-evaluation within the national policy space' (Ozga, Baxter, Clarke, Grek & Lawn, 2013, p.216)*

In St Achillas's RC after an Ofsted assessment which had evaluated the school as 'requiring improvement' because they were doing poorly in the provision for the gifted and talented pupils' needs especially in the area of mathematics, the head teacher introduced setting in this area and employed a secondary school maths teacher to teach the top set exclusively. In the following Ofsted report the school was assessed as having improved greatly, especially in the areas of their 'previous weaknesses'. Both this report and posters everywhere in the school highlighted the importance of 'striving for excellence'. A 'climate of excellence', where pupils are regularly offered challenging opportunities and high standards are expected in any field, has indeed been argued to be the ideal learning environment for gifted pupils (Van Tassel-Baska, 2008). This school however had nurtured a very competitive environment, especially in the top maths sets and it was very much driven by SATs. Teachers constantly referred to the upcoming SAT exams in order to motivate pupils to work harder, they allocated them to sets based on previous SATs assessments amongst other evaluations and spent most of their teaching time getting pupils prepared for the various aspects of the exams. As a result, pupils spent at least three quarters of their daily maths lessons on assessments. Every day they did one or two mental arithmetic tests, then a 'times-table' quiz, then a 'Maths Assessment' on a specific topic and finally they were given a worksheet with exercises to work on. In the end of these, the teacher gave pupils the answers and asked them to shout their scores out (in front of the whole class), which were then recorded on her documents and in the remaining time the teacher explained some of their mistakes or introduced new concepts. Similar findings about the excessive amount of time pupils spend in (preparation of) assessments have been reported by Harlen (2007), who drawing on findings from several surveys concluded that Year 6 pupils in England spend 'the equivalent of 13 school days practising and taking tests, in addition to other assessment activities' (in Berliner, 2011, p.295).

Another way I sensed this taxing impact that Ofsted inspections have on teachers was by the fact that St Achillas's RC cancelled my arranged observations for two weeks because the school was 'preparing for' and then 'being investigated by

Ofsted'. When I next visited the school and asked about the inspection, teachers seemed very relieved that the inspection was over and 'hoped that they did well'. As Ozga and her colleagues (2013) more eloquently explained:

> *'Although Ofsted links inspection to school improvement, improvement is understood and demonstrated in the raising of standards of educational performance that are measurable and comparable. […] Ofsted is not an agency of improvement through collaboration in development, but preserves its authority through its policing of the system(s) and through identifying institutional failings' (Ozga et al., 2013, p.214, 220)*

Moreover, as Case and his colleagues (2000) claimed 'the information and evaluation provided by an Ofsted inspection may form the diagnosis for school improvement […] yet a strong perception of inspection being essentially about accountability persists, and may be counter-productive to school improvement' (p.618).

The classroom environment in this school was highly competitive and pupils were constantly worried about their scores. It could even be argued that the teacher promoted this climate not only with the constant assessments but with her comments too. On the first lesson of the Year 6 top maths set for example, the teacher asked the class 'Who was worried they wouldn't end up in this set' and when half of the pupils raised their hands, instead of reassuring them, she smiled and said 'Good!'. Another very characteristic example of how assessment within the school promoted competition among the pupils is the following observation:

> *'Every Thursday they do the 'Times Tables Olympics' and get a medal if they beat somebody's time record. There are 6 levels-medals: preliminary, bronze, silver, gold, European and Olympic. A pupil is allowed to compete for the next level once he/she has managed to do all questions correct in the time given. For example, the preliminary level is given three minutes, the bronze level is given four minutes etc. The teacher puts an online stop-watch on the board. Pupils do not compete only within their class but also with other classes in the school and the winners are announced and awarded medals in Assemblies.' (St Achillas's RC, Observation Day 11, Year 5).*

However, research on the effects of assessment on the emotional development of pupils has reported that frequent testing significantly raises the levels of stress pupils experience and has even been associated with ensuing health problems (Hamilton & Brown, 2005).

St Giovanni's RC, had a long history of excellent Ofsted reports and teachers felt confident in their practice. The 'assessment of the school' and more specifically SATs played a very important role here too. Their Year 6 consistently achieved higher than the national average and that was enough proof for some of the teachers that what they do in school for their gifted and talented pupils, works. This assumption derives from the fact that both Ofsted inspectors and the government consider high grades in exams as proof that the school is doing a good work (Shaw, Newton, Aitkin & Darnell, 2003) and this probably is why teachers strive so hard to prepare their pupils for exams. When for example the school's gifted and talented coordinator was asked in what ways the school provided for their gifted and talented pupils' needs, she argued that they once published a school newspaper but had to drop it as they were too busy with their SATs preparation:

> *'Once you get to Year 6 and you start to filter off… you can't keep going around doing things. The preparation for SATs…, they need to do what they need to do. […] And you can see that it works, because by the time they get to Year 6, we do consistently achieve higher than the national average. So whatever we are doing for our higher ability children, it sort of comes through… By the end of Year 6, which is the end of their school journey, our highest ability children do indeed do really well, so whatever it is that's going on in the class all this way up, well, that's the proof of its effectiveness, really, isn't it?'. (St Giovanni's RC, Interview with Year 5 teacher)*

As Stanley and Baines (2002) commented, beliefs like the one cited above reveal teachers' fallacious view that a 'high overall pass rate on minimal competency exams indicates something about the quality of instruction [when in fact most] state assessments […] measure minimal competencies, not intellectual growth' (p.11).

In Year 6 the impact of SATs in the class's daily routine was much more evident. Firstly, the teacher split the class in two groups at the beginning of the year

and gave each group an hour and half additional instruction after school every week. As she explained,

> *'They come along on a Tuesday night and I extend their literacy and numeracy beyond what I would normally do in the classroom through extra lessons. So sometimes it might be through a programme in numeracy called 'Maths Whizz'. Where we push them up to the next level. So they'd have the opportunity to work on that, also 'Spellodrome' for their spelling and a programme called spag.com for their grammar and punctuation. Because they started at a low level this year with their spelling, grammar and punctuation so I've had to do a lot more work on that to push to level 5.' (St Giovanni's RC, Interview with Year 6 teacher).*

This phenomenon of doing 'after-school coaching' has been reported in relevant research about the effects of school accountability. Usually, however, such practices focus on the 'borderline' pupils and not on pupils of all abilities as was the case here (Burgess, Propper, Slater & Wilson, 2005).

Apart from doing extra classes in order to achieve the best possible SATs results, the teacher also organised her pupils in rank order and postponed Science lessons and preparations for the school show until after they had finished with their exams. As she argued:

> *'The way we are doing it is that these children here (pointing to her most able pupils) are expected to get level 5 at the SATs, which is over and above the national average. So they know from the beginning of the year, you are sitting in rank order. When you were seven you got this level, which means that you have to get a level 5. So it helps, so the more able children at that end of the table sort of drag these ones up by working next to them. […] We also studied Romeo and Juliet in autumn term. So we normally do our play in January, but because this class have needed so much acceleration to get them where we need them to be, I had to leave it and then come back to it after we finished the tests.' (School 4, Year 6 teacher)*

This so-called 'narrowing' effect of national tests on the curriculum has been observed by Wiggins and Tymms (2002) who argued that the time children spend on subjects such as PE, music and IT has been reduced. Their research evaluating the effects of testing and league tables arrived at the conclusion that English schools tend

to 'concentrate on their targets at the expense of other important objectives' (p.45). Moreover, as Berliner (2011) noted, curriculum narrowing, restricts the enjoyable and creative aspects of learning, harms the development of thinking skills and consequently 'reduces many students' chances of being thought talented in school' (p.287).

As it was mentioned earlier, the 'Assessment for the school' was also a very important aspect of all schools' routine. Teachers relied on these assessments to evaluate their pupils' 'initial levels' when entering primary school and their progress throughout the term, to make decisions about ability grouping or setting, to realise which were the class's weaknesses and shape their teaching accordingly. In all state schools pupils were tested when entering primary school with an 'initial' or 'baseline' assessment in numeracy and literacy. Most teachers argued that based on these tests, they identified each pupil's initial 'levels'. According to the results, they set targets for all of them and then, depending on when and whether they met these targets, they evaluated their progress with more internal assessments, usually at the end of each term. As a teacher from Macbeth Primary highlighted,

> *'You assess them constantly, you assess how they're doing with their work and if they're not coping with it, then you sort of make it easier for them, you help them, but if they're coping with it, you challenge them a bit more, and so you get to know the children's needs better'. (Macbeth Primary, Interview with P2 teacher).*

Similarly, a teacher from St Achillas's RC explaining how the 'individual targets' work, mentioned that:

> *'We obviously know from ongoing assessment what they are going to achieve. They have individual targets per child, so everyone has their targets at the beginning of their book and you take these targets from an assessment sheet. So you are looking at which area they need to work on. Then we decide what their next target is going to be, so it's constantly pushing them up to the next level'. (St Achillas's RC, Interview with Year 5 teacher).*

It was often understood that when teachers spoke about assessment, they almost always referred to written, formal assessment and not assessment of the pupils'

daily work in class, although when asked how they identified their gifted and talented pupils they stressed that they did not rely on tests only, but used various sources of information. What is more, written assessment in the shape of tests or quizzes was most frequently observed in maths and secondarily in literacy. A P7 teacher from Macbeth Primary for example, explaining the daily assessment routine in maths reported that:

> *'Every week we do a daily mental maths test. They get their scores on the following day and every Friday they do a formal test on what they had been working on during the week. And every week the test is harder than the previous one.' (Macbeth Primary, Interview with P7 teacher).*

As Hamilton and Brown (2005) argued, although testing in Scottish primary schools does not focus on determining teachers and school's efficacy, but rather 'on learner readiness and as confirmation of teacher judgements', it still relies mainly on written exams 'as the sole means of assessing children's learning' (p.50).

Another interesting example of how assessments were used to help a school identify their strengths and weaknesses is the case of St Achillas's RC, where, as the Year 5 teacher informed me, assessments indicated that their 'high ability pupils are doing well but the lower ability pupils are not and the gap between the two is very big'. As a result, the head teacher asked teachers to do an intervention to tackle this. They therefore decided to carry out more assessments in order to decide where they should focus on. When the class was given the test in question, the teacher announced that 'This test is not for you. This is for the head teacher to see what teachers need to do. This test is for us'. Following these assessments it was decided by the school administration that for the duration of the last term an intervention should take place in order to 'raise the achievement of the lower end'. For this purpose the main class teacher and two support teachers were asked to work with this particular class doing revisions, further assessments and even instructing pupils in small groups. It was obvious however that at least 10 out of the 25 pupils in class had already grasped the concepts and most of them were quite confident too. It was nevertheless planned for them to spend the next few weeks revising and practising the same material as the rest of the class. Moreover, despite originally arguing that this intervention aims at bridging

the gap between low and high ability, the teacher later added to me that it would also help them achieve better results in the KS2 tests the following year. This indicates the widely observed phenomenon of teachers putting all their efforts on ensuring that all pupils have reached a 'minimum' level considered satisfactory instead of making sure that all pupils are offered suitable opportunities to progress regardless of their 'original level of attainment' (Burgess et al., 2005). As it has been claimed, 'schools have incentives to improve the performance of students who are on the margin of meeting this target [and may] therefore focus their efforts on the marginal pupils, to the detriment of very low achieving or high achieving pupils, as the former group are a long way from meeting the target and the latter group will meet the target with less input from the school' (ibid., p.2). Research comparing the effects of national testing in English and Scottish primary schools concluded that in England mainly, schools tend to concentrate resources on 'borderline' children in order to make sure that as big amounts of pupils as possible will meet the national target levels (Wiggins & Tymms, 2002). Finally, it could perhaps be argued that when the DfEE introduced the 'Booster Class' scheme to specifically target these pupils, it strengthened teacher's belief that their efforts should concentrate on promoting the needs of 'lower ability' pupils.

Although the assessment in numeracy and literacy was so much test-centred in all schools, it is interesting that pupils were assessed in alternative ways in Science or the 'Topic'. In these curricular areas it was mainly the pupils' ability to produce an individual or group project or to conduct an experiment successfully that was under assessment. This was the case in Da Vinci's School too. Although the school did not seem to be affected by national exams, tests as part of the assessment of pupils' work were quite common. Even in the earliest stages of primary education, pupils were tested in spelling and calculations quite frequently. In this school however, the assessment of pupils' daily work was very important too. Pupils were expected to keep notes or copy material from the board in order to finally produce a 'chapter' on the topic they had been working on in class. When the instruction of the foresaid topic was completed, pupils handed in their books and teachers marked their work and gave them feedback.

Noteworthy is also that the assessment was almost nowhere differentiated. Despite the fact that in most schools teachers admitted having different expectations of their pupils depending on their 'abilities' or 'levels', and in most cases differentiated the tasks that pupils worked on in class, they did not find it necessary to do the same with their assessments. Indeed most teachers were asked particularly about it and they mainly argued that this is not essential as the purpose of the tests is to enable them to evaluate their pupils' progress, to understand whether they have grasped the main concepts taught in class and where their weaknesses lie. It can be therefore argued that when teachers assess their class they have 'baseline' expectations for all children regardless of their 'abilities'. This is even more surprising in the cases where teachers had decided that grouping their pupils by ability enabled them to better cater for their individual needs. Furthermore, in Da Vinci's School, where German for example was taught from the junior years and quite a big number of pupils were native speakers, the assessment was exactly the same for all pupils despite the often huge differences in their levels. One would wonder how asking a pupil who speaks German fluently to repeat simple two-word phrases would promote their learning, or how this assessment evaluated pupils' effort, especially considering that the teachers' motto was that they cater for the individual child's needs. The only case where the assessment was differentiated within the class was observed at the top maths set in St Achillas's RC. The (specialist) maths teacher argued that within her 12 pupil class she could identify two sub groups and she therefore provided them with different exercises and assessments accordingly.

This chapter focused on the analysis and discussion of my findings regarding the concept of giftedness and its nature, the beliefs and processes teachers adopt to identify and label gifted and talented pupils and finally the impact 'assessment of' and 'assessment for' the school has on a school's daily routines and specifically on the ways teachers approach gifted and talented education. The following chapter will look into teachers' 'sense of justice', the challenges they face in order to cater for all their pupils' needs and their awareness of and opinions about relevant national and school policies.

Chapter 8 Sense of Justice, Challenges, Policies

Following the description and analysis of my key findings regarding teachers' understanding of giftedness and the identification procedures adopted, I will here reflect on the focus of teachers' endeavours and their 'sense of justice', the challenges they face in their daily routine and especially those relating to the education of gifted and talented pupils and their opinions about relevant school or national policies.

8.1 Sense of Justice-Teachers' Focus

An interesting theme which emerged from my discussions with teachers about provision and plays a key role in their decisions about the ways to organise their teaching and support to pupils, is what I coded as 'Sense of Justice'. Often when teachers were asked about the strategies they use to ensure that the needs of their gifted and talented pupils are met, raised an argument about what is just to do, which pupils are in need of more support, whose needs are more urgent and discussed about what happens and what should be happening. These discussions usually led to a comparison between the needs of the more and less able pupils, which always originated from the teachers. That is I never asked a teacher to compare the needs of the more able pupils to the less able ones' or to argue about what their focus in terms of provision should be. Nevertheless, teachers often brought the subject of 'justice' up, usually to explain why they 'had to' neglect the needs of their most able pupils. In other cases however, teachers' arguments about justice explained their aspiration to provide not the same but equivalent opportunities to all their pupils.

Most teachers indeed raised the issue of justice in order to justify themselves about using most of the teaching resources and devoting most of their time dealing with the less able pupils. This will be further discussed on Chapter 10. In some cases, as it has already been pointed out, teachers adopted a negative attitude towards the

gifted and talented pupils. In Da Vinci's School mainly, teachers believed that there is no such thing as a gifted and talented pupil, and that 'bright', as they called them, pupils are encouraged to work more at home and therefore there is no need to 'push them any further' at school. Instead, they strongly argued that in the name of justice, 'individual' children with learning or behaviour difficulties should be involved in the lesson as much as possible and whenever extra support was needed they were keen to offer it with chiefly one-to-one instruction. For example, when a Year 2 teacher was asked how she provided for her most able pupils, she argued that she pays attention to the individual child's needs and spent at least a quarter of her interview with me talking about a pupil with learning difficulties. In particular, she informed me that the school held a special meeting to discuss about him and figure out ways to make sure that he is included in all activities and that she prepares individual work for him 'to make sure that he is engaged like a class pupil'. When however I asked her whether she did something equivalent for her most able pupils, she simply answered that their needs are sorted out, but later admitted that one of her brightest pupils 'gets frustrated and complains' when she works with those who need more support and does not include him in the activities (School 5, Interview with Y2 teacher). Other teachers in the school were less prejudiced against 'bright' pupils but despite acknowledging the fact that they are not challenged in the mainstream curriculum, they were content with offering them the 'chance' to help others when they finished their tasks or giving them a 'teaser' of what they would focus on later and 'allowing them to try it earlier', which as they argued 'can be quite a stimulus and raises their prestige' (School 5, Interview with Y5 teacher). In fact, however, teachers in this school designed curricula in order to meet the needs of 'the average' learner, assuming that the needs of most pupils would thus be met, and whenever any less able pupil was struggling, they differentiated accordingly to make sure that he or she is included. This phenomenon has been observed by several researchers and it has been argued that in such cases, if teachers do not modify curricula to meet the needs of the gifted learners, not only will their time at school be unjustly wasted, but a feeling of boredom may also result in misbehaviour and negative attitude towards school (Rotigel, 2003). The occasional 'teaser' and the 'opportunity' to help their peers are not nearly enough steps to ensure

that gifted pupils as well as all other pupils will have their equal and rightful share to meaningful education.

Similarly, the majority of Scottish school teachers and a couple of English ones were quite categorical about the fact that children with special educational needs were underprivileged and required the most they could offer them. Indeed they compared the fact that as they saw it, more able pupils were at an advantage due to their abilities and the support from home, whereas less able pupils were disadvantaged and therefore 'need more support than others'. When for example a teacher from School 2 was asked to think of her gifted and talented pupils' characteristics, she gave the following answer:

> *'I think some of my children in the higher ability group, probably they don't have any other issues, whereas that group at the bottom…, you see my Alexa is always absent… Alfred wasn't blending in, he didn't know all the signs when he came into primary 2, Leo has a brother, he is the twin of a boy with Down syndrome, so… You know, you've got to know the background of the children and I think it's easy to say high ability and low ability, but the lower ability, they had a lot of struggles and so you see, they need more support than others […].Whereas my top group… they do concentrate, they do not come with troubled issues, they get their homework done, and that's the difference that I can usually see, they have a lot of parental input, a lot of support, they are usually organized, they can get themselves…you can see my top group, they are usually on task before the others have even got their pencils organized, so those are key factors, key characteristics. (School 2, Interview with P2 teacher).*

Several remarks can be made about the above statement. First of all, it indicates a limited degree of familiarity with the concept of giftedness, since instead of discussing about gifted and talented pupils' characteristics, the teacher ended up comparing them with the less able ones and spoke mainly of their (social) behaviour and family situation (focused, hard-working, well prepared, organised, supported at home etc.).This however has been more extensively discussed on Chapter 7. Secondly and more relevantly, this teacher as most teachers who participated in my study had initially argued emphatically that *all* pupils –more and less able- have the same rights and should be treated as individuals with different needs. Similar beliefs have been

observed by Persson (1998) who reported that 'one participant argued: "You cannot make provision for 'one' without making provision for all!"' (p.192). The more however the interview progressed, teachers from Schools 1, 2 and 5 tended to give arguments such as the above, indicating that in fact all pupils should not be treated as equals and that less able pupils merit more of their time and resources than any other pupils, and especially the more able ones. They thought that it is only fair to make up for social and natural 'injustices' by being partial to a few pupils and practically unjust to a few others. The latter is even more evident from the following statement made by a school's Gifted and Talented Coordinator of all people:

> *'We focus mostly on lower ability groups. It's huge. You can't imagine how much difference it makes to them. Sometimes you feel you are those kids' parents, because you are actually trying to make up for a lack of interest or resources at home. We are doing that because we want to ensure that from very early on, kids do get the support they need and that we raise achievement for everyone, so none is left behind. You can actually see difference in kids from very early on.' (School 4, Interview with Y5 teacher).*

Moreover, although this statement contradicts what most teachers initially argued, i.e. that they provide equal opportunities to all their pupils, it is consistent with data coming from my classroom observations which suggest the opposite. This situation, has been described by Benbow and Stanley (1996) as 'inequity in equity'. As they argued, teachers should be responsive and build on individual pupils' differences; 'A one-size-fits-all educational system is not effective and hence not equitable. Equity should be viewed as equal access to an appropriate education' (Benbow & Stanely, p.257). However, as it appears from both of the interviews cited above, often teachers in their attempt to atone for social inequalities behave in an unjust way towards their more able pupils, who they consider 'privileged'. As Robinson (2003) claimed:

> *'Because of our failure to solve the inequalities of our society—the first wrong—we are allowing too many gifted students to be denied an appropriate education—the second wrong. It is not the fault of those students that the pace and level of their learning and understanding outstrip ordinary classroom fare. It is not their fault that many of them, certainly*

> *not all, have the support of committed and resourceful parents. It is not their fault that, although they come from families in all walks of life, higher proportions of them are Caucasian and Asian than is true for the general population.' (p.251).*

Finally, another interesting example is that not only did teachers in these schools pay more attention to their middle and low ability children, but they even asked me – a researcher who had clearly expressed my interest towards the gifted and talented pupils- to assist them in class by working closely with the 'bottom groups' and supporting them when they were asked to work on their tasks, thus impeding my attempts to focus my attention on the gifted and talented pupils.

In other cases, teachers seemed to have a better understanding of their most able pupils' needs and acknowledged their right to have an equal share of teachers' attention, underlining however at the same time the 'urgency' of less able pupils' needs. For example, a Primary 1 teacher argued that:

> *'The last thing you want is for the children to stagnate and to almost regress. I mean, you obviously need to focus on your lower ability and then your middle groups, but the more able do not deserve any less attention, which is why I think when we have pupil support in the classrooms, learning assistants, their time should be given evenly to everyone, they should be consolidating the lower able, but also pushing the more able forward and continuing to push them as far as they can go.[…] Because in a sense it's easy just to in a way let the more able just continue by themselves, because they don't require additional support, but if you do do that, then you are…you have the chance that they are not going to be pushed as far as they can and they are not going to be extended as much and that's not fair for them.' (St Hermylus's RC, Interview with P1a teacher).*

Although the above statement displays an enhanced sense of justice compared to the previous examples, reality was quite different. This teacher, as most teachers in St Hermylus's RC did not differentiate the tasks assigned to her pupils and even though she argued that during every literacy and numeracy lesson she spent equal time with each ability group, instructing and challenging them while the other groups worked on their tasks, she always spent much less time with them than she did with the less able groups. It could therefore be counter-argued that despite having an awareness of what

would be just to do, this teacher was twice unjust towards her most able pupils: first by assigning to them tasks pitched to the 'middle ability child' and then by spending considerably less amount of time 'challenging' them than she did with the rest of the class.

Finally, it was mainly teachers from the English Schools 3 and 4 who expressed their determination to be fair towards their most able pupils without comparing the urgency of their needs with their less able peers'. For example, a Year 5 teacher made the following earnest remark:

> *'Automatically we would always want to work with the 2B child, because that child is below age expected, but then on the other hand, if you don't work with the 4As, they will never become more able, or… The 5Cs should be pushed further because they are more able. So it is really difficult. I try to rotate my time through the week, so I try to spend more or less one lesson every week with each group and I just rotate around and then when I'm not working with the less able, the activity is easier so they can manage some of it independently, that's what I try to do.' (St Achillas's RC, Interview with Y5 teacher)*

Similar beliefs have been expressed by most teachers in Eyre et al.'s (2002) study, where teachers argued that 'able pupils have as much right to our time and teaching as any other group' (p.162). My observations however tell a slightly different story. Indeed, teachers in these schools were quite aware of their most able pupils' needs and made consistent efforts to meet them, by differentiating their tasks primarily and by setting in numeracy (St Achillas's RC) or by offering pupils after-school tuition (See Chapters 9 and 11). Still, the amount of time teachers spent on their 'top groups' was quite scarce compared to the time they spent on the 'bottom groups'.

Teaching assistants were almost exclusively working with the less able pupils. For example as one support teacher informed me:

> *'I work with the SEN children really, and I often take them out to have more like one to one support, because they cannot really concentrate in the normal classroom setting, or if it's not SEN children, it usually is someone who is not very confident, so that I will give them a bit of a boost.' (St Giovanni's RC, Interview with T.A.)*

Despite what one might expect, since less able pupils were looked after by the support teachers, classroom teachers devoted most of their time with them too. So for example, usually teachers in these schools would start the lesson with whole-class instruction, during which time if any support staff was present, they sat next to the less able pupils, helping them concentrate or giving additional explanations, and when pupils were asked to work independently on their (differentiated) tasks, both the support and the classroom teacher would spend at least three quarters of their time with the lower groups. Similar findings have been reported by Rubie-Davies and her colleagues who found that the vast majority of in-class support offered by Teaching Assistants focused on 'low-ability/SEN pupils' (Rubie-Davies et al., 2010). Pupils who did not have learning support needs were 'more likely to be one of a crowd' both for the teachers and TAs, while SEN pupils were the main focus of attention of TAs and teachers tended to have more 'active and sustained interactions with them' (ibid., p.430). Similar findings have been reported in the Guidance Report for Teaching Assistants which found that TAs in English primary schools principally support pupils 'who do not make expected levels of progress' 'or those identified as having SEND' (Sharples, Webster & Blatchford, 2015, p.8) and advised schools to review the ways TAs 'can support learning and improve attainment throughout the school' (ibid., p.10). What is more, as I observed in most schools, whenever 'interventions' were planned, they always concerned those pupils who had not yet achieved the goals teachers had set for the 'average' pupil. As a result, usually towards the end of a term, gifted and talented pupils would have to go through several hours of revision on concepts they had long before mastered. Nevertheless, these teachers' efforts to challenge their most able pupils by assigning to them tasks appropriate to their needs (see Chapter 9) should not be disregarded as being insignificant.

8.2 Challenges

Schools and teachers had to deal with various kinds of challenges in their daily teaching routine. In some school these challenges were more prominent than in others. These could be crudely divided into two categories: the general challenges observed in schools with an impact on various aspects of the pupils' learning experience and those specific to the education of gifted and talented pupils.

Despite the fact that all maintained schools observed were not from affluent areas it was only teachers from the Scottish schools who repeatedly reported a lack of resources as the main challenge they faced. In both School 1 and 2 teachers referred to a shortage of funding to employ more Pupil Support Teachers, in an attempt to justify an absence of provision for the needs of their most able pupils. As they explained, pupils with behavioural problems or ASL demand their full attention and when they are the only member of staff in class, this means they are not able to pay attention to the 'less pressing' needs of their gifted pupils. As a teacher from St Hermylus's RC lucidly clarified:

> *'It is extremely difficult to keep up with the expectation to push all children. I mean, look in this class there are 22 infants and myself and I'm lucky when I have somebody come in and support. […]I think it's because there's not a lot of resources at the moment, you know, in terms of staffing and budget. And we just don't have the facilities, like a learning assistant or a support person in classroom to work with you, which ideally is what you would want at this stage. But we understand that we just don't have the staff or resources at the moment to facilitate that. And you just have to work with what you've got at the end of the day. […] And it also depends on how your school would want to allocate their budget. So if we wanted for three more ladies to come in the classroom, at the end of the day we might have to think, where's our money, where should it go? And also we are an inclusive school and cater for all needs and backgrounds. The three PSAs we have are working one-to-one with individual pupils who need them. There's almost like a point system, who has got the greatest need, you know, and although you are thinking my classroom, my child needs a teaching assistant, actually when you look across the school the PSAs that are working one-to-one with individuals actually need to be where they are.' (School 1, Interview with P1b teacher).*

The above statement clearly illustrates the situation I observed in both Scottish schools and is closely linked to the second challenge teachers reported having to face, that is pupils' misbehaviour which will be discussed in the next paragraph, as it was either pupils with ASN or pupils with serious behaviour difficulties who usually got assigned a PSA. Interestingly, research on educational provision for pupils with Additional Support Needs (ASN) in Scotland has reported similar findings, that is, wherever tensions between parents and the local authority or school had arisen, they

mainly concerned 'the availability of support, such as learning support assistants or personnel able to provide more specialised personal assistance including intimate care' (Weedon & Riddell, 2009, p.77). It is however notable that although gifted and talented or more able pupils have been included in the group of pupils requiring additional support in Scotland (Riddell & Weedon, 2010; Scottish Executive, 2002), none of the participants from the Scottish schools seemed to share this belief; when considering additional education provision for pupils who have 'specific' needs, they always referred to those with learning difficulties or other disabilities as being entitled to support from PSAs or TAs as opposed to those who were 'ahead of their peers'. It should be noted here that high ability is only one example of ASN. In my study, I did not choose to look into other examples of ASN, such as autism, dyspraxia or fragile x syndrome and it can be safely presumed that the findings reported here would have been quite different had I decided to focus on all kinds of ASN. The picture of school provision for other types of ASN might have been quite different to the one reported here about giftedness, because all Scottish teachers participating in my study showed high awareness and commitment to catering for the needs of pupils who struggled or had to cope with difficult home conditions (see Chapter 8.1). Nevertheless, I cannot further speculate on this as the aim of my study was to look into teacher pedagogies for gifted and talented/more able pupils, but future research focusing on all possible types of ASN pupils and how they are catered for at schools would be quite interesting.

The issue of pupil misconduct or misbehaviour was most prominent in Macbeth Primary and Da Vinci's School. Most senior classes in Macbeth Primary had to cope with quite serious incidents of pupil misbehaviour. Pupils would walk in and out of the class whenever they liked, they shouted at each other, read athletic newspapers during the lesson, threw several items to each other, kicked their classmates or watched videos on their iPads. What is more, in P7, where pupils were allowed to borrow the school iPads and use them at home, a quite serious incident of cyber-bullying was reported, which teachers and the school's management had to deal with. As a result, the most able pupils' needs would have to be neglected since as a P4 teacher pointed out:

> *'when you have to deal with a class of 30 pupils, some of which with serious behavioural issues, you don't have any PSAs, it's even harder to provide for them, and it's really a shame… But, I don't know, I can't help it.'*

One specific example which further demonstrates this situation is the following observation:

> *'The teacher asks her P4 class to copy their (12) spelling words from the board. While they do this a couple of pupils start a fight, a few others play on their iPads and there's quite a lot of disruption taking place. The teacher tries to resolve the fight. The two pupils quarrelling start shouting at each other and throwing things to those of their peers who stare at them, totally ignoring their teacher. One of the pupils has some kind of a crisis and can't calm down. […] In the end, it took the class 40 minutes to complete this simple task as most pupils were either distracted or upset. A few pupils however had completed their task within just a few minutes and were waiting for the teacher to give them another assignment.' (Macbeth Primary, Day 12).*

In her study of the factors which impede the quality of schooling in disadvantaged neighbourhoods, Lupton (2005) found that pupils' emotional and behavioural difficulties greatly affected the quality of teaching. Teachers were very often diverted from teaching in order to counsel pupils and deal with major behavioural crises and teachers reported that as a result they failed to maintain high expectations of their pupils and ended up considering their lessons successful when most pupils worked on task for most of the time. Moreover, as Lupton (2005) remarked, the content taught was simplified, discussions were limited and tasks were reduced to copying or revising, which is very similar to what was observed in Macbeth Primary.

Incidents of classroom disruption were not so aggressive in Da Vinci's School but were as frequent, especially in the older classes. This was unexpected, given that in this (independent) school, classes were not as crowded as in the other schools, usually there were fewer than 20 pupils, there was a very small number of pupils with SEN/ASN, all teachers were experienced and pupils were not seated in group-tables, but in single pupil desks, and were thus less tempted to chat with their friends during the lesson. However, pupils usually had the same teacher throughout primary school and it could therefore be argued that as they grew older they became more familiar and

thus more relaxed with their teachers. As VanTassel-Baska and Stambaugh (2005) argued, teachers' 'limited classroom management skills' are often to blame for the fact that many teachers are unable to differentiate their instruction in order to meet their gifted learners' needs. When incidents of pupil misbehaviour are as pronounced as those mentioned earlier, it is of little surprise that teachers decide to prioritise their resolution. Nevertheless, when such incidents are not infrequent, and teachers have not planned ahead opportunities to challenge their more able learners, provision for them becomes harder to achieve.

A revealing example of how a lack of sufficient support staff in combination with a child's disruptive behaviour can impact on the opportunities to progress a more able child has, comes from St Hermylus's RC, where a P1 pupil was almost always observed playing at the back of the class while the teacher instructed the whole class. When I asked the teacher about it she informed me that he is a 'very able pupil' who gets easily bored listening to stuff which he already knows and often gets disruptive. She had therefore decided to let him play alone and only asked him to get involved in the classroom's activities when she handed the class tasks to work on independently. Unfortunately, the tasks assigned were not differentiated either, and therefore one could conclude that this twice-exceptional pupil (see Chapter 1) was seriously neglected in school, despite the fact that his exceptionality was correctly identified. Not only was he deprived of the opportunity to learn anything new and was never challenged in class, but he was also most likely isolated by being so obviously singled out of his peers.

In the same class more than half of the pupil population came from a different ethnic background and when they first came to school did not speak any English. As a result, teachers in the junior years of St Hermylus's RC struggled to communicate with them and they would often appeal to older pupils for help translating some important instructions to them or even reading them some books. Indeed, as I observed from the first day in P1, half of the class was unable to understand any of the teacher's instructions and looked quite lost. As the teacher remarked

> *'…their language is a barrier and when you don't have any support teachers in the class it is so demanding. Pupils with SEN or English as a foreign language simply need one-to-one provision. That means that I will either ignore their needs or try to cater for them as best I can in order to make them feel included, assuming that the more able pupils will be fine without my support. […] I don't know how they expect us to manage! And they EVEN want us to challenge them at such high levels. I am doing my best and keep telling myself that the most important thing is to keep them happy and safe. I can't really do everything…' (School 1, Interview with P1b teacher).*

The implications of this teacher's approach to support for those pupils with English as an Additional Language (EAL) are quite alarming. Indeed, it was quite disturbing to observe how these pupils appeared to spend hour after hour without understanding anything of what was going on in class. Similar situations have been observed by Franson (1999), who argued that mainstreaming EAL pupils has not secured 'equality of participation and achievement' (p.70). Nevertheless, the fact that the school enacted 'humanising practices' by appreciating EAL pupils' linguistic and cultural resources and encouraging them to interact with peers in their mother tongue is very important for the 'development of academic resiliency' (Salazar, 2008) and the establishment of a culturally responsive learning environment (Ford, 2010). Moreover, it is quite easy for one to comprehend how daunting this teacher's responsibility towards her pupils is, considering all the significant challenges she faces daily at school. The fact that many urban English and Scottish primary school classes are nowadays so overcrowded, in combination with the fact that schools in more disadvantaged areas have to deal with other, important issues, such as the ones described above, make matters worse both for teachers and pupils. However, the necessity to challenge all pupils should not be considered as a luxury to be offered when all other matters have been resolved. Keeping pupils 'happy and safe' is indeed the most important thing, but making sure that all pupils learn something meaningful at school should not be considered as an unreasonable or secondary demand. To this end, strong leadership and administrative support which promotes long term learning is essential (VanTassel-Baska & Stambaugh, 2005). Moreover, it should be noted that in multicultural classes like the one described here, the risk of misidentifying minority pupils due to their limited English proficiency is very high. Therefore, teachers must

take the necessary steps to safeguard bilingual pupils' complex needs by supporting them in order to become proficient in English, ensuring that teaching standards and expectations are high for them too (Howley, Rhodes & Beall, 2009) and modifying instruction and assessment in a responsive way to pupils' cultural and learning differences (Ford, 2010).

Finally, noteworthy is that most of the 'general challenges' mentioned above, were alluded to by the least experienced participants of this study. For example, as a teacher from Macbeth Primary disclosed to me:

> *'Well, to be honest, there are several factors. For example, I am rather inexperienced, and this is quite important on how you manage a classroom. The main challenge is that I feel that because I am so inexperienced, I can't manage a class of 30 children, because 30 children is quite much. And I think it takes time. The second is that these specific children need quite a lot of your attention, more than other children, because they have behavioural issues or genetic issues, because that's how they were born. And I think they need more support than others'. (Macbeth Primary, Interview with P4 teacher).*

Indeed, as Fantilli and McDougall (2009) reported, novice teachers experience serious challenges within the first five years of their in-service work, such as difficulties due to a lack of classroom resources or difficulties relating to classroom management. Especially the struggle of dealing with 'unruly' pupils is one that overwhelms teachers universally and hinders them from focusing on more important aspects of their work (Goodwin, 2012). Last, effective differentiation in order to cater for pupils with ASN/SEN is one of the most significant challenges all teachers face and has been attributed to the fact that there is 'minimal and/or inadequate in-school support and a lack of experience/training specific to the various exceptionalities encountered upon entry to the classroom' (Fantilli &McDougall, 2009, p.823).

One of the 'specific' challenges cited most frequently by teachers as relating directly to the provision for the gifted and talented pupils' needs is a lack of information or even the inconclusiveness of the debate concerning what constitutes a gifted and talented pupil, how they should be identified and catered for. Quite a big number of teachers from School 3 and 4 confessed that they were uncertain about what

a gifted and talented pupil is and felt that providing for their needs is no more one of the state's priorities. As a teacher from St Achillas's RC argued, 'Gifted and talented is quite a moody area, really, because there is no set guidelines on this child is gifted and talented if they can do this'. Several gifted and talented researchers have supported a similar argument that in order for teachers to effectively promote gifted and talented pupils' needs, more specific guidelines on how and when to introduce specific strategies should be given to them with ongoing pre- and in-service training (e.g. VanTassel-Baska & Stambaugh, 2005). Moreover, investigating the beliefs of experts in the field of gifted education about the most important challenges gifted and talented pupils face, Pfeiffer (2003) found that 94% of experts reported a 'lack of consensus on how to conceptualise and define gifted and talented' as the greatest issue in the field, which agrees with what my participants reported.

Another important factor which has direct impact on the sort of provision that is offered by a school is, unsurprisingly, a lack of funding combined with a reduced interest on behalf of the government. First of all, it was frequently argued that when more funding was available specifically for this group of pupils, schools were able to purchase useful resources, organise more educational trips, register their pupils to exceptional programmes or competitions and overall provide them with different opportunities, suitable for their needs. Additionally, according to some teachers, the fact that state funding was removed from the gifted and talented group in England and was only available for the pupils in Pupil Premium (disadvantaged pupils of all abilities) was an indication that catering for this group's needs was no more an urgent requirement. As the gifted and talented coordinator at St Giovanni's RC explained

> *'Soon after it [referring to her placement as a g&t coordinator] was passed over to me, a lot of the funding glided up, the local authority advisor retired and was never replaced, there were no more activities provided, […] and it used to be a quality mark, eh I don't know what it was, this quality mark thing, but that sort of ceased as well, so I still do the paperwork for that and it was useful for the school to sort of look again to see what we were doing for the gifted and talented, but it was like, it was a case of… we.. I kept the register, we still got it and […] we look at it at Christmas […] and say, are these children still gifted and talented or do they need to go off the*

> *register for any reason?' (School 4, Interview with Y5 teacher).*

Similar arguments concerning funding for gifted and talented education have been often raised in the relevant literature. Indeed it has been declared that where funding is reduced or non-existent and there are no 'strong' relevant policies to regulate provision for the gifted and talented, initiatives to cater for these pupils are limited, leaving it to the private sector to champion gifted provision, depriving thus those pupils who are not able to afford it of the right to be effectively challenged (Ambrose, 2009; Brown, Avery, Van Tassel-Baska, Worley II & Stambaugh, 2006; Stoeger, 2009).

Furthermore, and in line with the above, a number of more pressing priorities, such as a change in the curriculum, upcoming school assessments and most importantly the SATs (see chapter 7), put more pressure on English teachers and did not leave them with any free time or desire to consider the best ways to provide for gifted and talented pupils. As a teacher from St Giovanni's RC eloquently explained 'at the minute the priorities are different. Well, we are changing the curriculum, so staff time and priorities are on things like year assessment, targets, and on getting your planning done and… So there's not the time for you to say, right, well I will spend my time looking for activities for the gifted and talented' (School 4, Interview with Y2 teacher).

To conclude, an interesting fact about the challenges cited by teachers as some of the reasons why their provision for the gifted and talented pupils' needs is often inadequate is the following; Teachers from Scottish schools referred almost exclusively to 'general challenges' as described above, such as a lack of pupil support assistants, pupils' behavioural issues etc. This on one hand indicates that pressing matters such as pupils' inability to communicate in English or instances of serious classroom disruption result in the neglect of the 'secondary' issue of the education of gifted and talented pupils. It might also indicate that teachers are not very familiar with more specific issues concerning gifted and talented pupils and that is why they did not refer to them. Noteworthy is also that English teachers who attributed their struggle to provide for gifted and talented pupils to more 'specific challenges', did not report and

were not observed to face issues of understaffing or pupil misconduct to such an extent as their Scottish colleagues did. In fact, both Schools 3 and 4 employed a substantial number of support staff, who focused on the 'bottom' groups when the teacher instructed the whole class, marked pupils' work and worked on one-to-one basis with SEN pupils. It was also often observed that two PSAs were working in the class in addition to the classroom teacher. Moreover, no serious issues of misconduct were ever observed during the time I spent there and although pupils in these schools did not come from very privileged areas, additional difficulties such as large amounts of pupils with English as a second language did not exist. Finally, no challenges, either general or specific, were mentioned by teachers at Da Vinci's School. That was perhaps expected, given that this is an independent school and thus neither the 'lack of funding' challenge was applicable nor did pupils registered there come from socioeconomically disadvantaged backgrounds. The significant number of bilingual pupils was already fluent in English when entering the school and there was a very small number of pupils with ASN/SEN overall. Last, since teachers did not consider gifted and talented pupils as a distinct group whose needs ought to be addressed they did not reflect on any possible challenges relating specifically to gifted and talented provision.

8.3 Policy

In the following paragraphs a discussion about the role school and national/local authority policies have played in the provision for gifted and talented pupils will take place. All participants in this study were directly asked to mention any national or LA policies which referred to gifted and talented pupils or highly able pupils as well as relevant school policies which have shaped their practice. None of the participants gave any specific examples of central policies which have influenced their teaching and most declared unfamiliarity with the matter. Some teachers, mainly from the English schools showed 'relative awareness' by referring indefinitely to old policies which they assumed they have now been dropped. St Giovanni's RC was the only school which had an explicit, though as the deputy head teacher admitted outdated, written policy to address the needs of these pupils. Other schools, such as St Achillas's RC and Macbeth Primary stated that the provision for their gifted and

talented pupils was part of their inclusive policy, although no explicit mention on these pupils was made there. St Hermylus's RC did not have any policies for the education of their more able pupils, but argued that differentiation is a tool they use to provide for all their pupils' needs. Finally, in Da Vinci's School teachers argued that they did not pay any special attention to the needs of their more able pupils or have a distinct policy in place to address their needs since by providing for all learners, everyone is catered for. Finally, teachers in English schools engaged in discussions about governmental or school policy much more than their Scottish colleagues did and they frequently compared perceived current policies to previous policies arguing that governmental interest in the provision for the gifted and talented pupils has definitely dropped over the last years.

As it was mentioned above, Scottish teachers did not refer to any official policies addressing the needs of the more able learners. Almost all teachers argued that there is no explicit policy guiding them on how to cater for those pupils' needs. Only one teacher from a Scottish school engaged in the discussion about government policy. As she explained when asked whether the Curriculum for Excellence strives to promote the needs of these pupils:

> *'I think it does report that you strive for excellence, you strive for challenge, you strive for all these things, but I definitely think the focus in Scotland at the moment is to bridge the gap between the lowest and highest end in a class.[…] I do think, you know, that the government policy at the moment is to look at the lower ability and try to push them forward. They are saying that there is such a huge gap between the lower unprivileged and their academic mean, so how do we bridge that gap? That's what they want a lot of us to focus on and that's where a lot of money goes towards. But I think if there was some funding for the more able and particularly for the gifted, rather than just for the less able, the landscape of gifted and talented education in Scotland would be very different to what it is now.' (School 1, Interview with P1b teacher).*

This statement however, indicates a confusion between high/low ability and privileged/underprivileged backgrounds, which may partly explain the reasons why teachers concentrate on 'lower ability-underprivileged' pupils (Chapter 8.1).

Likewise, teachers in Scottish schools had not drawn explicit policies to provide for the needs of their gifted and talented pupils. Most argued that provision for this group of pupils relied on the teachers' discretion and sense of justice. For example, as a teacher stated:

> *'I don't know of any particular policy that's in the school. Things like that, techniques, we are encouraged to use. I think it's more kind of up to the class teachers themselves. There's not like a generic thing that you do. There's not necessarily a set of step by step guide for your more able pupils' (St Hermylus's RC, Interview with P7 teacher).*

Wherever setting or ability groups existed, teachers argued that this was their policy to provide for the gifted and talented pupils (see Chapter 11 for more). Specifically, as a P2 teacher argued:

> *'I am not sure if there's an actual policy in place. We test them initially just with the SEAL screener for numeracy and then with literacy we test them on common words and that sort of thing and we are taking a rough kind of guide on how to split them in groups. Then we test them again before Christmas to see if they are in the correct groups. After that, at this stage unfortunately, there is not an awful lot of support, it's up to the class teacher to scoop things up, and there is a very big tail end at this class, so it's very difficult. […] Then Mr M. (the head teacher) comes and has a look at the attainment and says, actually we need to push particularly the middle and the high end […]. I think he's going for the high, because generally, as a teacher, you pitch up middle, but I think he kind of says, no, we're going to pitch up high and we will pick up the lower achievement ones as well with learning support and hopefully the middle ones will be pushed on. I don't think though that that's an actual policy. But that's why he said we should do setting for maths and focused reading groups too.' (St Hermylus's RC, Interview with P2 teacher).*

Other teachers answered very vaguely the question of what their gifted and talented policy entails. When further prompted it was evident that provision for these pupils was not regular or consistent throughout the school, but it very much depended on teacher initiative and was almost always reduced to the occasional 'challenge'. Indicative of this is a dialogue with a P7 teacher from Macbeth Primary:

> *'Me: So do you have a policy for this group of pupils?*

She: Aha, yes.

Me: You do?

She: Yes.

Me: Can you please tell me a little bit about it?

She: Yes, so we've got a support for learning meeting each term, which looks at not just the children who are falling below the gaps, but at your higher achievers, your middle and your lower children. So we meet with some of the staff and talk about what strategies we've got in place and what strategies we're putting in place for next term. So it's an opportunity for us to share ideas amongst professionals, but eh, it's usually just one other person I meet with, but sometimes they might say, ok I might put a bit support in place. For example, IF I've got some really high achievers, they might say, ok I'm going to give you a timetable time where this person is going to come in and work on some stuff. You're still responsible for preparing it, unless it's the Support for Learning teacher that is working on some kind of intervention. But, sometimes, an extra pair of hands can do wonders. Usually though it is just actually, I will give them something and I will say, here's a challenge for you and you're going to mark how you do it. So, you know, it's really task dependent.' (School 2, Interview with P7 teacher).

To summarise, teachers in Scotland were mainly unaware of any relevant policies and guidelines which could help them improve provision for gifted and talented learners. Despite in principle recognising the importance of meeting all learners' needs, the great majority of teachers did not consider serving gifted learners' needs as urgent. None of the participants in this study declared awareness of the instructive guidelines published by their LA on provision for highly able pupils or the training seminars and publications of the Scottish Network for Able Pupils. None of the two Scottish schools had developed relevant school policies to meet their needs and most assumed that the funding for pupils with ASN did not concern more able learners. They thus concluded that both the government and LA's priority is 'vulnerable' pupils, i.e. pupils with learning or behaviour difficulties or pupils with disabilities, although both the ASN Act (2004 and 2009) and the Curriculum for Excellence clearly state the need to support more able pupils to reach their 'fullest potential' (See Chapter 4). Only one teacher had some relevant training on highly able pupils' needs (had written her Masters dissertation on this topic) and most felt that they

did not have the resources and knowledge to offer them the educational opportunities they need. It could be therefore argued that education provision for highly able pupils in these schools has not altered much since the publication of the 'Education of Able Pupils' report in 1993 (Chapter 4).

On the other hand, teachers from English schools had a more heightened awareness of relevant policies. Still, most of them remembered vaguely what such policies directed and argued that they must have now been dropped as it has been long since there was any discussion about those pupils. Nevertheless, even those who seemed to be the least informed on such policies, argued that it is important to cater for the needs of gifted and talented pupils as well as those with SEN. As a teacher stated:

> *'I think, yes, the state's requirements have probably changed… definitely. I think you've got 'Every child matters' and that's what the government brought out and every child has got to be provided for and reach their potential whether they're special education or gifted and talented. You've got to look at the child.' (St Achillas's RC, Interview with Y5 teacher).*

Similarly the same school's deputy head teacher argued that:

> *'I think perhaps policy within the authority has kind of, you know, shifted focus. I am not sure. But, if you're in a good school with good leadership going on, you are always aware that you've got gifted and talented children who need to be stretched. As a good professional and as a leader you'd have that in the back of your mind all the time and it's, you know, part of your duties to these children that they are given the opportunities they need, because they only get one chance of this.' (St Achillas's RC, Interview with deputy head teacher).*

Indicative of the confusion regarding the current state of affairs on gifted and talented education is a Gifted and Talented Coordinator' statement:

> *'We've had a gifted and talented policy quite a few years ago. A few years ago no, the authority, eh, we had a gifted and talented Lead and she used to send kind of links to the schools. Sort of guidelines and links to things that she had found that would be of possible use in schools. We know how authorities change and people move on, or the whole system changes.*

> *There was a big re-organisation of the authority a couple of years ago. And we probably still have a gifted and talented Lead. I will try to find out who she is. I can't remember at the moment, but I think we still have a Lead.' (St Achillas's RC, Interview with deputy head).*

Similarly, as the following statement from St Giovanni's RC deputy head teacher indicates, most English teachers were under the impression that the policy on gifted and talented education has changed over the last years. Indeed, as she argued:

> *'Ms M who works in year 1 and 2 used to be our gifted and talented coordinator a few years ago. And she did masses of work on gifted and talented including workshops with the staff. So it would be interesting to talk to her because there WAS a policy when she was the coordinator. But all that has now changed' (School 4, Interview with Deputy Head).*

The impact of this change of policy or, more accurately, the quite reduced governmental interest towards the gifted and talented pupils is better illustrated by the above alluded to former gifted and talented coordinator. As the teacher explains below, a huge variety of opportunities used to be offered to broaden the mind and nurture pupils' talents. All these however have been now dropped and provision for the gifted and talented pupils is reduced to making sure they progress to the next level.

> *'When I first started here, gifted and talented was all of a sudden a big thing with the government and they wanted to push and extend, so every school had to have what they called the gifted and talented coordinator. […] When I first took it over, they wanted to extend the more able children, because they felt that they weren't being pushed in school and it was… What my job entailed was to sort of be the champion for the gifted and talented children, because up until then it was all about pushing the special needs and pushing the bottom, and pushing, pushing and then they decided that actually if you pull from the top, everybody will rise up. So my job was to sort of be their champion and make sure that their voice was being heard and make sure they were being challenged in all different areas right through the school. So it wasn't just looking at levels for maths and English, but it was things like, if there was a child really able in dance or a really able geographer or… it was right across the curriculum. […] I sent them a questionnaire to find out what all the children were doing at home, if there was anything they did at home that we didn't know about, like music, swimming, trampolining or*

> *karate. […] So it wasn't just about the academic. It was about the whole child and where they were excelling. And celebrating that and then it was up to me to create opportunities to extend it further.* ***[…] So then it was really different and again at that time, because it was a national thing and it was being pushed and you got extra money, we could do it. Now it seems very much to have gone back to just getting them through their levels in the National Curriculum and the levels. It's all about levels. They don't look at the whole child. Eh, it's not valued****. […] We now do none of the things I just described, and it is really depressing if you come to think about it that all this effort is thrown away.' (St Giovanni's RC, Interview with Y2 teacher)*

It was furthermore argued by almost all English participants that the provision for this group of pupils is so different to what it used to be, because the national focus has changed. Teachers still felt they had to cater for their needs, but since it no more appeared to be a governmental priority they decided to focus on other- more urgent- aspects of learning. Specifically, as the same school's current G&T Coordinator eloquently stated:

> *'A few years back there was a big flag in the local authority to do with gifted and talented children and there was a local advisor and schools could go in for a quality mark for their gifted and talented and there was a whole load of paperwork that you had to fill in and all this quality assurance that you had to self-evaluate against. And it was Joanna who was our coordinator at that time. […] And all this again comes from the national level. Wherever the national focus is… At that time there was a national focus on that. So all Coordinators got paid to do a course, they got a diploma, they all went off to a college to do that and then fed back to the staff. […] I don't know why they stopped, I would imagine it was funding? When it first stopped for our LA, for a couple of years there was a conference that took place once a year in M. And I went to those, I attended all the workshops and things like that, but really that was about all there was for gifted and talented. And now there's not even that any more. But the schools still have to have it! Schools did not stop having their gifted and talented registered and monitored, but… that's just the way that it works now…' (School 4, Interview with G&T Coordinator).*

Overall English teachers' responses with regard to school policy for the gifted and talented pupils were quite as vague and elusive as Scottish teachers'. Despite acknowledging the need to nurture their most able pupils' gifts and talents, teachers

seemed uncertain as to what their school's specific policy on the matter is. Within St Achillas's RC for example I got very different answers to the same question on school policy. The deputy head teacher argued emphatically that the school has an explicit policy for these pupils, but when prompted to give more details on that, she replied that they make sure they identify these children and challenge them so they don't 'coast along'. Another teacher replied that she did not know if there was a school policy on the matter but that since their 'head want[ed] [their] more able children to progress as much as possible, he employed a secondary teacher who knows how to teach at that level' referring to the top maths set. And finally another teacher stated: 'No, I don't think we have a gifted and talented policy. If we did, it would be with senior management at the first instance and then it would be brought out to the rest of the staff. So I think if you are gifted and talented in our school, we do try very hard to develop that. [!]'

More enlightening responses came from some of St Giovanni's RC teachers. Despite the fact that most declared unawareness as to whether the school had a policy in place for these pupils and were uncertain of the specific steps they should take to ensure their talents were nurtured, a few teachers explained that the school used to have a detailed policy but it is now quite neglected. As one teacher further explained:

> *'it is not as high profile as it was, because at the time when it came out [centrally], obviously we were sent out lots of materials from the government saying 'try this, do this, go on this course', but now…, obviously we don't do those groups, we don't have the afterschool problem solving clubs, we don't do chess clubs… We still do acceleration in the juniors. You've probably seen that, […], but because at the time we weren't looking at accelerating, but more at broadening and giving them different things, eh and celebrating the whole child rather than pushing them on…. Now there is acceleration in the juniors and the after school thing the Y6 teacher does. And it is obviously all for the SATs and their levels. […] And there's been a lot now on pulling up the special needs again, so the focus has gone back to that end. But don't get me wrong, in this school we are quite good at keeping the children up, we are all so tuned in to our pupils, but certainly the way that it was, it's not as much, it's not the focus that it used to be.' (School 4, Interview with Y5 teacher)*

To summarise, participants from the two English schools were more explicit about key issues relating to gifted and talented provision than their colleagues in Scotland. Most were aware of previous policies which addressed their needs, but all thought that these policies had been dropped and that there were no more guidelines available to help them cater for these pupils. None of them was aware of the Institutional Quality Standards (IQS) and Classroom Quality Standards (CQS), i.e. the set of guidelines circulated to schools in England in order to improve education provision for gifted and talented pupils (see Chapter 4). Koshy and Pinheiro-Torres (2013) found that 31% of gifted and talented coordinators in their sample had not heard of the IQS, 'suggesting that these schools may have been implementing the initiative without taking note of what was offered as support documentation or had decided to ignore it' (p.966). Moreover, the majority of participants from England referred to the cut of funding for gifted and talented education as a proof that national interest in this area was dropped and explained that this resulted in a serious reduction of the opportunities offered to gifted and talented pupils. Nevertheless, they were all aware that they were required to cater both for high and low ability pupils and that Ofsted Inspectors evaluate their effectiveness to meet all pupils' needs. They felt however, that they were not supported in this neither by the Local Authority (as they had been in the past) nor by the government, and in most cases what the school did to comply with the expectation to cater for these pupils was to compile a register with the names of those pupils they considered gifted and talented and monitor their progress, even though as was discussed in the previous chapter they were usually confused as to how they should identify and then cater for them. Similar findings have been reported by Casey and Koshy (2012), who found that opportunities for gifted learners have shrank, teachers often feel overwhelmed by their task to meet all learners' complex needs, while government officers make public statements about how teachers fail to challenge their most able learners, without making any comprehensive efforts to further train or provide them with useful resources.

Particular interest poses the case of Da Vinci's School. As it was mentioned earlier, teachers in this school argued that they do not have a specific policy for those pupils, because their philosophy is to 'care for the individual child. […] This means

that we want to draw on the individual skills or abilities of every pupil. We don't focus on the 'more able pupils' as a group, but on every single child'. This viewpoint is in principal very reasonable. As Van Tassel-Baska (2008) pointed out, gifted learners should not be seen as members of a group, but as individuals and services offered to them should be personalised accordingly. However, teachers in this school despite their advocacy for individualised teaching, mainly ignored more able pupils' needs. For example, as another teacher further explained:

> *'I would say that our policy is NOT to hothouse them. […] But to absorb them into the class. Challenge them, certainly give them challenges, but not push them ahead. I think we challenge them laterally rather than pushing them on to the next stage. So, for instance, they have an individual project to do. The bright ones, you know, will be expected to do far more. They will do anyway, but far more than the others. Or if they are writing in their history books, they will do far more. Eh, so we try, I think to challenge them within what the class is doing' (School 5, Interview with Y6 teacher).*

This answer was not very revealing as to the ways they challenge these pupils, other than requiring them to do more, in other words expecting them to challenge themselves. This behaviour has been frequently observed in teachers who are not well informed on issues relating to gifted education and may has been associated with a decline of pupils' motivation and underachievement (Clinkenbeard, 2012; Siegle & McCoach, 2005). What is more, this respondent's main concern relates to ensuring that 'bright' pupils do not stand out, but are absorbed into the class, which indicates the impulse to 'cut down the tall poppies' and is attributed to teachers' discomfort with intellectual precocity (Geake & Gross, 2008). When however prompting another teacher to explain why there is additional support for the less able pupils since they provide 'for the individual child' anyway, the teacher stated that:

> *'I've done a couple of sessions of…, right, I know you're enjoying maths, let's push you. Come on now and let's have extra maths, and they LOOOVED it. They loved it. But there's a practical limit of what you can do, you know. But also, I think there's definitely a point for teaching the more able ones some other useful skills. Including, how to get on with people… Because, I think, we have this whole child, artistic education, then the stand-out intellectual kids, we are kind of trying to*

> *broaden them. We're not pushing them on. We try to stretch them up rather than push them on. So, I've done some extension sessions with them, but not as much as I would like to have done.'*

Further provoked to explain, why there were plenty of opportunities available for the talented musician or artist and not for the gifted mathematician, the same teacher argued that:

> *'Well, that's kind of the school's ethos, you know… […] With a particularly gifted child in maths, we'd probably spend most of our time looking to broadening him into other topics.* ***Because it's this association with the intellect****. So at this age, we want them to be… eh, not just in their head. So it's very much kind of giving them a bit to keep them going, but not trying to push them into the head. And that's the age and stage of the curriculum, it's kind of broadening. But when they go to the upper school, you know, we've had kids sitting Highers in a Standard Grade class. […] So, people will put on a course for a child, if it's gifted, in the Upper School, in all sorts of topics. But not at this stage, now it's all about broadening them.' (School 5, Interview with Y5 teacher).*

The above quotations illustrate this school's attitude towards the 'intellectually' gifted pupils which relates to the school's ethos as described in Chapter 6.. Although it is not very accurate to describe this as the school's policy towards these pupils, given that all participants argued they do not have a policy to address these pupils' needs, the fact that the same, admittedly strong, views regulated the ways they all treated them, indicates that this attitude might be described as the school's informal policy. Summing thus the school's informal policy up, it chiefly entailed that 'bright' pupils should not be distinguished in any way from the other learners and whenever they stood out from their peers, teachers should not further challenge them ('push them ahead'), but make sure that they were absorbed in class. It could even be surmised that the school strived to hold brighter pupils back, in order to ensure that their intellectual talents did not set them apart from the rest of the class and their efforts concentrated on making sure that these pupils developed their social skills and improved on non-cognitive areas. Finally, although in most cases no differentiation of instruction, tasks or assessment took place, pupils were expected to produce higher quality work, by 'challenging themselves'.

Having thus at length reviewed my data regarding teachers' sense of justice, the challenges they face and their awareness and beliefs about relevant policies, I will now analyse my findings which relate to the provision for gifted and talented learners in the following chapters.

Chapter 9 **Provision (Part 1)**

This chapter focuses on the question of how schools and specifically teachers addressed the issue of provision for the gifted and talented pupils. Participants in this study offered various answers to this question. The most frequently cited response was the one coded as 'Challenge', second was 'Differentiation', then 'Different Opportunities', 'Peer teaching' and 'Ability grouping'. These were the major responses and were referred to 144, 125, 70 and 112 times respectively. Some considerably less frequently cited responses were: 'Acceleration' (13 times), 'Specialist Provision' (11 t.) and 'One-to-one time' (7 t.). In this chapter I will analyse the responses coded as 'challenge' and 'differentiation'.

9.1 'Challenge'

When teachers were asked which steps they take to provide for the needs of their gifted and talented pupils, all teachers replied that they try to challenge them. Most teachers used the term 'challenge', while others used the term 'push', 'stretch' or 'extend'. All such responses were coded under the label 'challenge'. However, data deriving both from the interviews with teachers and my in-class observations indicate that there are two broad ways in which teachers challenge their pupils. One is the 'planned' challenges, which are integrated in the daily lesson and are relevant to what the class has been working on recently and the other is the 'standard' challenges which consist of general, additional work, always available in class to function as 'challenge' whenever pupils have completed their task ahead of the class. Both planned and standard challenges were mainly tasks handed to pupils to work on by themselves. Some teachers however, 'challenged' their most able pupils during whole-class instruction or when teaching smaller groups. What is more, teachers were observed to challenge their pupils mainly in numeracy and much less frequently in literacy. Challenging tasks in other curricular areas were very rarely observed. Only Da Vinci's School challenged their pupils in non-academic areas, but challenging them in the traditional areas was arguably considered a taboo. Finally, some teachers offered the

same challenging tasks to all pupils, others only to those regarded as the most able and a few tailored challenging tasks to all ability groups.

As it was mentioned above, every participant in this study, even those who did not believe that there are pupils who could be characterised as gifted and talented admitted the need to challenge their 'most able' or 'bright' pupils. Often, teachers argued that the reason why they decide to 'challenge' their gifted and talented pupils is because they themselves demand it. Indeed, I often observed pupils working in the 'top' groups in numeracy and literacy taking the initiative to challenge themselves by working with bigger numbers than the ones given by the teacher or adding a larger number of characters in a story than instructed to. For example, I recorded the following observation from St Hermylus's RC:

> *'The teacher asked the class to throw the dice, write down the numbers shown and then produce patterns of numbers skipping one or more. The pupils on the top group however, after doing as the teacher instructed them for a few times, challenged themselves by creating patterns from much bigger numbers than they could get from the dice, such as 50, 70, or even a 100.' (St Hermylus's RC, Observation of P2, Day 10).*

What is more, it was particularly interesting to me how a P1 from Macbeth Primary seemed to always ask their teacher for more challenging activities. This was not the only class where pupils looked excited when a challenging task was assigned to them, but it was the only one where pupils kept asking their teacher for new challenges on an hourly basis as if it was a privilege to be allowed to work on such a task. As some researchers have maintained, offering pupils interesting, enjoyable and challenging tasks, and giving them the choice to engage in these, increases pupils' motivation and provokes curiosity (Gentry, Rizza & Owen, 2002). When I asked the teacher to explain this to me she said that:

> *'I use that language all the time, I tell them 'You're going to have a challenge', because it prepares the child for something a little bit trickier, a little bit harder, to push them that little bit further. So sometimes they are successful, sometimes they are not. But they always ask for it, because they want to be challenged. And I think it's got to be like that. You've got to challenge them and if they are not coping, there's no point*

> *pushing them on to something they are not really understanding. You should instead bring them back down to recap something and then they will get back onto the same level of work they have been doing just now.' (Macbeth Primary, Interview with P1 teacher).*

Indeed in classes where the ethos of challenging pupils frequently was nurtured, they always took up on new challenges enthusiastically and perceived the challenge as a reward for their effort. As Eyre and her colleagues (2002) argued, creating a classroom environment of high expectations, where pupils feel secure to risk failing, is key to the effective provision of all pupils' needs, and particularly the gifted and talented ones.

However, despite the fact that all teachers argued that gifted and talented pupils needed and loved to be challenged, very often they did not provide them with challenging activities but with simple additional or consolidation tasks with the sole aim to keep them busy while the rest of the class focused on the original task. This was quite frequently observed, and occasionally admitted to by the teachers. As it has been already argued, where pupils are offered inadequate and unchallenging tasks and where the teaching pace is too slow and repetitive, gifted children are not only bored and demotivated but they may also underachieve (Phillips & Lindsay, 2006). When I asked a teacher from Macbeth Primary what happens when a pupil needs or asks something more challenging, she stated that:

> *'Based on the school policy, what I do is when someone completes his tasks early, I ask them to read their book or play a maths game on their iPads. One of these things'.*
>
> *When further prompted to answer whether the game on the iPad is challenging she replied that:*
>
> *'It's just a game to practise what we've been doing, something like a more fun exercise. But it's the same for everyone, I wouldn't say it is challenging. So…, how shall I put it, I think that for those pupils who indeed want something more challenging, we often don't, you know, we don't provide them with the right opportunities so that they will be challenged, because there are other children who need more support with the basics.' (Macbeth Primary, Interview with P4 teacher).*

It could however be counter-argued that with little more planning on behalf of the teacher, challenging activities could be prepared in advance to make sure that gifted and talented pupils get the opportunities they deserve and thus, not making sure that they offer these opportunities, indicates a certain lack of interest towards this group of pupils or just a peculiar sense of justice by which less able pupil's needs should always be the teacher's priority. As Mills (2003) underlined, teachers who aspire to be effective and just towards all of their pupils should be willing to devote the time, effort and energy to change the direction of a lesson when necessary, offer challenges and varied learning experiences to those who need them.

As it was mentioned in the introductory paragraph of this chapter the challenging tasks teachers assigned to pupils in the classes observed could be classified as standard and integrated. Standard challenges could be defined as those always available in class, usually in a box at one end of the class and consisting of problem solving tasks, puzzles or other similar activities aiming to promote pupils' thinking skills or quite frequently test pupils' memory on previous knowledge. Teachers usually used glorifying labels for these activities such as 'The Big Challenges', 'Golden Box', or 'Magic Tube' to further tempt pupils to undertake the challenge. Pupils were usually encouraged to choose whichever puzzle/ activity interested them most when they completed their tasks early, and teachers gave them feedback at some point in the indefinite future. It was made clear to pupils that success in these tasks was not important, since the class would have the opportunity to further review the skills tested in these activities in the future. Standard challenges were available to all pupils, predominantly in maths, and their main purpose was to engage those who completed their tasks fastest in something stimulating. For example, although teachers in St Achillas's RC, where setting was implemented for numeracy, offered 'standard' challenges to the bottom as well as the top sets, they did not supply their classes with similar challenges in any other topics. An alternative form of 'standard challenges' was used by teachers in Macbeth Primary. As senior classes' teachers explained, they used special programmes/applications on the school's computers or children's iPads which allowed them to challenge them. Nevertheless, as it was mentioned earlier, some

teachers admitted that most of these tasks were not actually very challenging but rather a more amusing way to practise some of the things already learned.

In fact it was often observed that 'standard' challenges did not draw pupils' interest as much as the integrated ones. Especially when it was up to the pupils to decide whether they wanted to do one of the challenges in the 'challenge box' or read a book/ sit silently while their pupils carried on with their tasks, they did not seem motivated enough to take up the challenge. A similar view was expressed by Phillips and Lindsay (2006), who suggested that 'promoting choice and independence in students' learning' is motivating and thus pupils should be 'allowed to explore areas of their own interests' (p.59) when possible. As a teacher from Macbeth Primary noticed, often, able pupils avoid doing challenging work especially when the challenge in question is not integrated in the lesson:

> *'You know sometimes they say I'll take a back seat now so you need to encourage them to take a challenge. For example, I've always got problem-solving challenges in boxes that are 1, 2 and 3 Chillies (difficulty) and they don't want to do any of that. But today this mystery thing caught their interest and they all took off and did that. And it was a really challenging problem, but they wanted to do it.' (Macbeth Primary, Interview with P7 teacher).*

It could be speculated upon that pupils regarded standard challenges as an additional chore aimed at 'keeping them busy' and not as something meaningful and stimulating. For this reason, Diezmann and Watters (2000) argued that challenging tasks in numeracy 'should be authentic tasks that provide opportunities for [gifted pupils] to emulate the practices of mathematicians, though at a less-sophisticated level' (p.14).

Integrated challenges on the other hand can be defined as those challenges planned by teachers in advance or in some rare cases deriving on the spur of the moment as a result of the ways pupils responded to the lesson or the tasks assigned to them earlier and were always related to the concepts introduced at that period. As Sutherland (2008) emphasised, two of the most important principles of effective challenges are that they are planned ahead and that they are based on a recognition of

what pupils already know about the subject. These challenges were in most cases available to selected pupils, usually the gifted and talented ones. It should be noted here that integrated challenges should not be confused with differentiation. Indeed, usually, wherever teachers differentiated most consistently and effectively, integrated challenges were quite limited and maybe unnecessary. In contrast, wherever teachers assigned all pupils the same tasks, integrated challenges were more frequent and quite crucial to the gifted and talented pupils' learning. To this more extensive reference will be made in the following section of this chapter.

Macbeth Primary was one of the cases where 'integrated challenges' were implemented most frequently. Most teachers provided their class with three different levels of tasks on the topic they worked at daily. The first two levels were usually simple consolidation tasks and the third task was a little bit more challenging. Although in theory teachers argued that all three levels were available to whomever felt like challenging themselves, most teachers instructed their pupils to work on the first two tasks and only the top groups were asked to move to the third task once they had finished with the other two. What is more, although the third one was certainly harder than the other two, it did not seem to challenge the most able pupils much, since they always completed all three tasks before the rest of the class had finished the first and rarely made any mistakes. Indeed, as Diezmann and Watters (2000) perceptively pointed out, tasks selected to suit the majority of pupils in a mixed setting are not sufficiently challenging for the gifted pupil. In response to that, some teachers offer challenging tasks, such as the ones observed in my study, but these may still fail to sufficiently challenge them and teachers should consequently provide more appropriate work. What should be kept in mind is that gifted pupils crave for such challenging opportunities (ibid.).

Pupils in the junior classes of this school always looked forward to trying the third 'Chilli Challenge' and teachers often disciplined them by threatening not to let them do it if they did not focus on the lesson. Indeed as I observed one day, a rather active but able boy who belonged to the top group for maths asked his teacher: 'Am I going to be challenged today?' To which she replied that: 'No, you didn't focus on your work very well today, so you need some catching up to do' (Macbeth Primary,

Observation Day 4, P2). In fact, as it has been already mentioned, most able pupils observed seemed to regard challenging tasks as a reward. Similar observations have been made by Phillips and Lindsay (2006), who reported that gifted pupils enjoyed taking up difficult challenges or intellectual risks and were not inhibited by a fear of failure. In addition, it has been argued that the more frequent and embedded such challenges are to the daily lesson, the more increased the general interest of gifted pupils in learning becomes (Eddless-Hirsch, Vialle, Rogers & McCormick, 2010).

St Achillas's RC combined both types of challenges (the planned and the standard ones). The teacher of the top sets in numeracy always supplied pupils with planned challenging activities. For example, during one of her maths lessons, I observed the following. The teacher introduced the Roman Numerals to the whole class and then asked them to work out a few simple examples on the board (one digit numbers only). Then pupils were given harder questions with two digits to sort out by themselves. When these were finished, three digit numbers were given to those who had found the previous task easy. And finally the teacher gave them their 'final challenge' as she called it, which was a question of writing the date: 08/10/2015 in Roman Numerals. Everyone was excited with the final challenge even though only a few managed to sort it out in the end. (St Achillas's RC, Observation Day 11, Year 5). In addition to these planned challenges, the teacher always supplied her class with little booklets full of 'additional challenges'. As she explained when the pupils first joined her set, they could choose any task from these challenges to work on whenever they completed their other tasks. Their booklets were collected at the end of the week to be marked and given feedback.

Some teachers challenged their most able pupils during instruction. To be specific, as it has been previously mentioned, in most cases the class's routine started with whole class instruction, which was followed by individual work on (differentiated or undifferentiated) tasks assigned by the teacher. During instruction teachers asked their pupils a few questions as a revision or to practise the new concepts. Often teachers spent more time asking their most able pupils challenging questions during instruction than they did with the rest of the class. For example when the P1 teacher from St Hermylus's RC introduced subtraction to the class, she posed three questions to the

whole class but asked pupils from the top group two questions each. When however pupils moved to their groups, teachers spent considerably more time working with the less able groups than with the most able ones. This was especially the case in St Achillas's RC and St Giovanni's RC, where teachers started the lesson with whole-class instruction/ discussions and then assigned different tasks to the ability groups, while they and any PSAs focused on supporting the less able groups. Occasionally though, teachers decided to spend some time challenging their most able pupils instead of supporting the less able and it can also be speculated upon that such decisions were triggered by my presence in the class. The scarcity of this is indicated by one of my observations when the teacher said: 'Okay, today we're going to do things a little differently. I want my dolphins [less able group] to work on this silently for a few minutes, while I challenge my giraffes [top group]'. To this the top group reacted very enthusiastically and joined the teacher at the front of the classroom. However, such instances were extremely rare. Indeed, as the teacher admitted to me later:

> *'Usually it is the ones who need extra support that stay on the carpet to do some extra work until they have understood it and the others go to their tables and do simple work individually. Today I did it the other way around and kept my most able pupils to do something more challenging. Truth is they love it!' (St Giovanni's RC, Informal chat with Year 2 teacher).*

In fact, I only observed teachers teaching their most able pupils in small groups only four times, throughout my stay in both St Achillas's and St Giovanni's RC. However, as several educators have argued, critical to gifted pupils' progress is that they spend time with their teachers, who can challenge the ways they think or approach a problem, give them appropriate feedback, and gain a better insight on their strengths and weaknesses in order to plan future work (Diezmann & Watters, 2000).

In the junior classes of St Hermylus's RC, where pupils were assigned undifferentiated tasks to work on in their ability groups, called 'work stations', pupils were challenged through the work they did when working for approximately seven minutes per lesson with their teacher in small groups. For example during literacy in P1, all pupils were assigned simple tasks such as copying correctly a small number of words or colouring in the relevant picture. When it was the turn of the top group to

work with the teacher, she asked them to use a few given words to make a sentence. Everyone was excited about it and worked very successfully. None of the other groups was asked to do anything like that. When, however, the teacher moved to the next group, the pupils were asked to carry on with their much simpler tasks.

Often 'setting' was argued to be the most effective way for teachers to provide their pupils with challenging work. Indeed, teachers from St Hermylus's RC and St Achillas's RC argued that setting enables them to challenge their most able pupils in numeracy, not explaining however why this is not possible within a mixed ability class. As a teacher from St Hermylus's RC stated:

> *'You can see in our numeracy settings, we try to cater for them by doing setting. So we try to cater for the more able pupils with our numeracy work and that's in a room where they can finally be challenged. In this class for example I have grouped them in 3 subgroups and I gave my most able pupils a Heinemann 8 page to do and they had it finished in no time, so obviously, this wasn't challenging them enough. So I decided they needed to be pushed on a little bit more and work on the next level up. Whereas this wouldn't have been possible in the mixed class' (St Hermylus's RC, Interview with P7 teacher).*

Reis and Renzulli (2010) and several other researchers have argued that gifted pupils need and can be offered challenging opportunities in regular classroom settings, although this is rarely the case (VanTassel-Baska, 2008). As VanTassel-Baska (2008) observed, a lack of teacher training on the ways to challenge and differentiate curricula appropriately results in very little differentiation in heterogeneous classrooms, which is why many educators conclude that grouping gifted pupils together can result in better tailored instruction. This will be more extensively discussed in Chapter 11.

Of all the classes observed, School 5 has again been a very distinct case. Despite acknowledging the fact that gifted or 'bright' pupils need challenges to flourish, teachers argued that they try to 'stretch them up rather than push them on'. As it was further explained by most participants, bright pupils are given different opportunities in the non-traditional academic areas which allow them to be 'stretched outwards' to different areas of interest (see following chapter for more). What is more, bright pupils are expected to 'challenge themselves' which means that despite

assigning the same work to everyone, bright pupils are expected to produce higher quality work and indicates that this teacher abdicates his responsibility to enhance his pupils' learning. Nevertheless, when prompted to explain how not challenging or 'pushing' gifted pupils could not hinder their progress, teachers' answers were rather vague. As one teacher in particular argued, referring to his 'very bright' son who graduated from this school, he and his wife were concerned whether the school was nurturing his talents:

> *'He was in a class where a lot of the children were… intellectually challenged I would say, not in any way near his wavelength, but he was very happy here, and somehow he got what he needed. Because as parents we were sometimes a little bit worried- is he getting what he needs? He was always happy, so we carried on, and in the end he was totally fine. You know, it's not held him back. So I think this idea, sometimes, that you have to push and push and push, isn't always valid.' (Da Vinci's School, Interview with Year 7 teacher)*

This statement reveals a degree of contrast in the role and behaviour this teacher adopts towards his pupils as opposed to his son. Although, as he assured me he was never worried that his 'bright pupils' might not be appropriately provided for, he had doubts about whether the school met his son's needs. In fact, as was revealed in another interview at the same school, a very able boy in mathematics had to move to another school, because he was not challenged enough, and as his teacher admitted, the school was not the best option for the particular child. On the other hand it is noteworthy that although teachers were generally opposed to the idea of challenging pupils in academic areas, that was not the case in the non-academic cases, such as art, music, handwork etc. Indeed, pupils who showed particular talent in these areas, were praised and encouraged to nurture their talents and teachers did not hesitate to give them opportunities to be challenged by assigning to them different work from their peers or by assigning them specific roles, such as lead singer or actor.

Finally, the difference in the extent to and method by which teachers in Scotland challenge their pupils compared to their colleagues in England can to a degree be illustrated by St Achillas's RC head teacher's argument that: 'We must not provide only for those within age expected. We must stretch those children who are already

above age expected'. What this statement reveals is not so self-explanatory. Having however spent much time with teachers in Scotland and England I later realised that when teachers in Scotland discussed about challenging their gifted and talented, they always gave examples of challenging activities within the perceived limits of the curriculum for that age group, despite the fact that the Curriculum for Excellence explicitly states that the various curricular levels can be reached earlier or later than the average (see Chapter 4). Only exception to this rule was numeracy for the senior classes of St Hermylus's RC, where pupils were cross-age set. As it has been previously mentioned, most Scottish teachers gave only hypothetical answers to the question of the provision for those pupils who had already mastered the skills required of their age group as they claimed that they did not have any 'extremely gifted' pupils in their classes. Teachers in England however argued that often gifted and talented pupils were already competent in the concepts and skills introduced to the rest of the class and therefore needed to be challenged by extending their learning or by introducing to them new concepts. As the deputy head teacher from St Achillas's RC further argued,

> *'We constantly try to challenge them. The specialist maths teacher we've employed for maths is doing that very successfully. We've got a couple of pupils who said that it's the first time they've found maths hard. Imagine being challenged for the first time on your Year 5!' (St Achillas's RC, Interview with deputy head).*

Astonishing as such a statement may seem, Eddless-Hirsh et al. (2010) reported similar findings. Indeed, as a pupil stated: 'Before I wasn't challenged, so I kept on thinking, you know what? This is easy, so I don't have to use my brain, so I sort of didn't use it much and it in a sense it got dusty 'cause I wasn't used to using it.' (p.115). At this point however it should be noted that even when teachers acknowledged the need for their gifted and talented pupils to be challenged, in practice this was rarely the case observed, especially for the non-traditional areas (e.g. science and history). What is more, as a teacher from St Giovanni's RC explained to me, the new guidelines in England instruct teachers not to 'accelerate' their pupils:

> *'Basically what we do is we teach everything in our year group and say for example addition and subtraction in Year 3 is with*

> *three digit numbers. Now I know there are some children in my class who can do 4 digit numbers, because we've tried that every now and again, but the guidance that was given is we don't go to the next step up which will be Year 4. We just kind of take them sideways and solve more problems, more puzzles, where they're taking what they know and they are using it in a different context. That's the idea behind it. But sometimes that's not enough for very able pupils.' (St Giovanni's RC, Interview with Y3 teacher).*

Indeed, the more recent guidelines for effective primary teaching in England instruct teachers to extend 'the highest attainers […] through greater depth rather than breadth or acceleration' and 'within the same content' (Teaching Schools Council, 2016, p.21-22). However, concerns similar to the teacher's cited above have been expressed by Kapusnick and Hauslein (2001) who underlined that offering more breadth and depth when studying a particular topic, though very important, it often is not enough for some pupils who will need to be introduced to new topics earlier or to 'delve into an unrelated aspect of a course' (p.158).

9.2 Differentiation

Differentiation was the most popular strategy teachers referred to as a way to provide for their pupils' individual needs, including of course the needs of their gifted and talented pupils. However, participants in this study adhered to various types of differentiation: 'through the level of support', 'per choice', 'through adult input' and 'though individual targets'. Most teachers employed this strategy when assigning their pupils tasks to work on in class, some during group instruction and a few during whole-class teaching too. Most differentiated in literacy and numeracy mainly, while a few did in all subjects. There was very little differentiation observed for homework or in assessments. In most cases observed, differentiation was more consistent in upper/senior rather than lower/junior school. In the cases teachers set for maths, differentiation was even more regularly used. Moreover, some teachers argued in favour of accelerating their gifted and talented pupils as part of an effective differentiation. Finally, despite the fact that 'differentiation' was referred to 125 times in my interviews and observations, 'no differentiation' was referred to 121 times! It is therefore clear that although teachers ostensibly supported this strategy, equally often the strategy in question was not implemented or was implemented ineffectively. For

this reason, in the following paragraphs I will attempt to analyse all the aspects of 'differentiation' and 'no differentiation' at length.

As it was mentioned above, almost all teachers interviewed argued that they differentiate their instruction in order to cater for the whole spectrum of abilities within their class. Indeed, as Tomlinson (2000) stated, differentiation is the educational response to pupils' differences in readiness levels, learning profiles and interests with learning experiences designed to match individual needs (Hertberg-Davis, 2009). However, when teachers in this study were further prompted to describe the ways they do that, their answers painted a different picture to the one originally imagined. Specifically, teachers from Schools 1, 2 and 5 argued that they 'differentiate through the level of support [they] give them, through the tasks that they have to do'. As a Primary 1 teacher explained:

> *'In terms of differentiation in my literacy and my numeracy I tend to differentiate by the level of support that I give, so in children that are more able, I let them work more independently or in pairs to develop their social skills. I also differentiate by the task that they have to do. So it's simple tasks, but maybe the level of scaffolding the one group receives, the other doesn't. So they work more independently again.' (Macbeth Primary, Interview with P1 teacher).*

Indeed this quotation illustrates what was observed in most classes from Schools 1 and 5 and to a lesser extent School 2. Teaches usually assigned everyone the same, rather simple tasks but let the most able pupils work independently, while they supported their less able ones. From the above cited interview it appears that some teachers consider this as an adequate form of differentiation despite the fact that the simple tasks assigned to the most able and gifted pupils cannot serve as a challenge, suitable for their needs, even when pupils are left to work on them independently (Tomlinson et al., 2003). Proper 'scaffolding' to match gifted learners' needs should include tasks that are 'just beyond' what these pupils can already do, but can be achieved with structured support (Taber, 2010).

A unique case of differentiation was observed in P7 of Macbeth Primary, where the teacher encouraged her pupils to decide which level they want to work at in

numeracy and literacy. The groups that derived from pupils' choice of level were not stable. Pupils could reconsider their choices whenever a new topic was introduced and decide whether they felt more or less confident with it. This process of differentiation, as the teacher argued, conveys pupils the message that ability is not a fixed entity and that through hard work better results can be obtained. Specifically, as she explained:

> *'Differentiation in this class is per choice. As opposed to me telling the children what to do, you know, obviously sometimes it requires teacher direction, because somebody might choose something that is way too challenging or way too easy for them, it's about having a dialogue and saying, do you think this is helping your learning? What might help your learning more? […This] allows children to choose the challenge that feels most appropriate to what they know about a topic. And as I say to them, because some of them have this perception 'I'm rubbish at maths', I say, actually, you may find this concept more challenging, but you may find you are really good at this? So, I like them to swap between the chillies, because I don't want to put a ceiling on their learning.' (School 2, Interview with P7 teacher).*

This 'differentiation per choice' has been described by Bragg (2016) as 'Choice and Challenge'. This strategy 'involves teachers providing children with a range of options set at different levels of 'challenge' and allowing them to work through the activities themselves, in dialogue with teachers and peers' (Bragg, 2016, p.81). Pupils are usually motivated by the freedom of choice they are offered (Smith, 2005; Taber, 2010) and as this teacher emphasised, 'no ceiling on their learning' is set, which is exactly what teachers in Bragg's (2016) study highlighted.

Similarly in reading, despite the fact that most classes grouped their pupils by ability, this teacher allowed pupils to choose the book they wanted to read based on their interests mainly and then the tasks assigned for each of the book were differentiated according to the pupils' needs. Moreover, she did not use the 'traditional definition of a book' but a more modern and varied one. She encouraged her pupils to read texts from magazines, websites, newspapers, and so on, provided they were appropriate for their age. As the teacher further explained:

> *'You know, my reading groups are kind of mixed ability, so there's more… choice of tasks than what they're actually*

> *reading and then, within the reading group it's differentiated, because some children might choose a task that requires them to read and understand […], others could do something harder such as finding inference in the text, you know, the hidden messages, really analysing the text, or look at the character from another perceptive, so it's actually differentiation by choice of task there' (Macbeth Primary, Interview with P7 teacher).*

Kapusnick and Hauslein (2001) shared a similar belief, that differentiation becomes more effective when pupils are encouraged to 'choose topics or modes of expression based on their interests' (p.157) in reading as well as in other areas.

What is more, the same class was often encouraged to create the activities they wanted to work on in literacy instead of choosing a set of prearranged tasks. Indeed, as their teacher reported:

> *'The children here become more involved in kind of creating these activities. So rather than me saying here's your activities, this is what you're doing today, this is them saying, I'm creating my activities. This is what I'm going to do. So that's another form of differentiation.' (Macbeth Primary, Interview with P7 teacher).*

In agreement with this teacher, Betts (2004) argued that the highest level of differentiation is learner-led. Encouraging pupils to develop the tasks to work on and the avenues to explore is critical for gifted and talented pupils, because it allows them to develop unique 'passion areas', it fosters autonomy and 'self-discovery', and results in 'the highest level of learning' (Betts, 2004, p.191).

However, despite this teacher's apparent commitment to differentiation in order to serve every individual child's needs, she was not so flexible when it was obvious that her most able pupils in maths were not challenged enough by the textbooks she had provided them with. As she admitted, she did not hesitate to provide her less able P7 pupils with a P6 textbook, but she did not choose to further enrich or accelerate her most able pupils who had already acquired all the P7 skills in numeracy by providing them with a more advanced textbook. As she argued:

> *'We started a mental maths programme this year and I got a P6, a P7 and a P7 extension book, but the extension was too*

> *easy. I tried to find alternative material, but essentially, you know, a lot of maths is like, ok they can understand the processes, what can they do next? So it's applying them to the problem solving. So while the other children are consolidating their mental maths, these really able children will be doing some problem solving. So they will be extending their learning, if they are doing that.' (Macbeth Primary, Interview with P7 teacher).*

Although 'problem solving' can indeed challenge gifted and talented pupils, the continued use of the 'too easy' book with these pupils suggests that most of the time they receive instruction and work on tasks which are not suited to their needs and interests. As Tomlinson et al. (2003) highlighted, only when tasks, materials, curricula and instruction are differentiated effectively to match their needs, does equality of opportunity become a reality.

Another alleged way of differentiation was implemented throughout almost all of Macbeth Primary. As it was alluded to earlier in the subsection 'Challenge' of this chapter, teachers in all classes except for P7 assigned their pupils 3 different 'Chilli Challenges'. However the top groups were expected to start with the first two challenges and then proceed to the third, while the less able groups were usually instructed to work only on the first. When I questioned a P2 teacher's argument that this process could be characterised as differentiation, she claimed that: 'They may all be doing the same work as you said, they do exactly the same sheet, but that is called 'self-differentiation'. So they can only move on to the next sheet if they've completely understood and were able to cope with the first sheet.' However, the 1st and 2nd Chilli Challenges, as the teacher was very well aware of, were always very easy for the most able pupils who finished them within a few minutes and then moved to the 3d challenge. To further illustrate this, I cite the following example from one of my observations:

> *'1st Chilli Challenge: It is a sheet with groups of three dolphins with a number between 1 and 10 on them. Pupils are asked to colour the one with the smallest number in each group orange and the one with the biggest green.*
>
> *2nd Chilli Challenge: A sheet with a set of numbers (between 1 and 10) written in the wrong order. Pupils are asked to put each set of numbers at the correct order.*

> *3d Chilli Challenge (ONLY FOR THE TOP GROUP): A sheet with 9 different sequences of numbers which 'go down by tens'. Pupils are asked to fill in the missing numbers in each sequence.' (School 2, P2, Day 1).*

Indeed it has been observed that when teachers differentiate, they still focus their efforts on those who struggle, under the assumption that gifted pupils do not need differentiation (Brighton, Hertber, Moon, Tomlinson & Callahan, 2005). Similar findings have been reported in Tomlinson et al.'s (2003) review, where it was found that even teachers in English and Scottish classrooms who 'purportedly' differentiated to meet all children's needs, occupied advanced learners 'with practice of skills in which they were already competent' (p.123) and as a result, more able pupils became bored and were frustrated by the lack of challenge.

Da Vinci's School had a similar process of so-called differentiation. As a Year 3 teacher explained to me, she differentiates the pupils' assignments by allowing them to work at their own pace and move to the most challenging tasks when they have finished the easier ones. Specifically, she stated that:

> *'I have a book of different sheets of different difficulties, so I kind of try to progress them through it, so that they are building basic skills … but each section, it might go deeper for some, there may be some harder additions, so some of them will kind of go down each branch of that and finish it, whereas some may just do a couple, so they can kind of keep on with the other skills and not lose it.' (Da Vinci's School, Interview with Year 3 teacher).*

However, while observing this class, I frequently noticed some pupils go through task after task without any difficulty until the teacher decided they had done enough. For example, during one of my observations I recorded the following:

> *'The teacher handed them all out a sheet with some subtractions. A girl completes this within two minutes. Then the teacher gives her another sheet with a bit more challenging questions which she finishes again within two minutes. She is given another one with several horizontal mathematical operations, titled as 'extra, extra, extra hard challenge', which she finishes within 5 minutes, when most pupils manage to get the second sheet done within 15 minutes. Once most pupils finish their first sheet, the girl in question finishes her 4th page*

> *and the teacher asks her to read her book. Only three more pupils manage to start the 3d challenge.' (Da Vinci's School, Year 3, Observation day 9).*

It is quite inevitable after such observations for one to wonder whether this form of 'differentiation' is effective in serving all children, as their teacher claimed, when it is so obvious that at least some of them are not challenged by the tasks assigned and re-assigned to them.

Another type of differentiation, which can be termed as 'differentiation during group instruction' was observed mainly in School 2 and in School 1's numeracy sets. Teachers in School 2 had integrated this sort of differentiation in their day-to-day teaching. They had therefore always planned different concepts to introduce to their groups and relevant tasks for them to work at while still under their guidance. As it has been previously mentioned, teachers in this School started their literacy and numeracy lessons with a whole-class revision and then pupils were assigned the 3 Chilli Challenges to work at. While pupils worked on these tasks, one group would join the teacher's table and be introduced to new concepts. Then pupils would work on a few examples and once the teacher was sure her group was confident with them, they would move back to their seats to carry on with the Chilli Challenges, while another group joined him/her. It should be noted here that contrary to other cases where teachers might regularly oversee each group's work for a short length of time, in this case the teachers did not just set their pupils a task to work on under their supervision. Instead, they introduced their groups to different concepts, which they then practised with them. Most other teachers introduced new concepts to the whole class at the beginning of the lesson and then 'challenged' their most able pupils or supported their least able. As a teacher from this school explained: 'in the past we taught the whole class and didn't really differentiate. But in the last few years we concluded that splitting the tasks in different groups and teaching them what is most suitable for them is better and they can achieve more highly this way.' (Macbeth Primary, Interview with P2 teacher). An example of the different concepts each group focused on during group instruction is the following:

> *'The teacher informs the class that they have finished working on single sounds and will be working on digraphs and*

> *trigraphs only. The apples (M.A. group) will focus on 'ai' sounds, the pears (L.A.) on 'oa' sounds and the pineapples (H.A.) on compound words. Then the pineapples are asked to stay on the carpet to work on number 6, 7, and 8 blocks of words with the teacher. Later, the apples were asked to work on blocks 3, 4 and 5, while the pears worked on blocks 1 and 2 with me'. (Macbeth Primary, P2, Observation Day 10).*

As Tomlinson et al. (2003) concluded, differentiated instruction in small groups gives 'teachers the flexibility to address learner variance more appropriately than does sole reliance on whole-class instruction' (p.132). However, this should be followed by differentiation in materials, tasks and assessment (Tomlinson et al., 2003).

In some cases instruction was also differentiated during whole-class teaching. For example some teachers, while introducing a new concept or revising one that was previously presented, asked different groups of pupils different questions. The following observation further illustrates this:

> *'All pupils sit on the carpet at the front of the class in ability groups. They start with the daily revisions on 'Why we learn sounds', 'what is a digraph', 'what are the tricky words and what can we do about them' etc. They are using the smart board to help them with their revision and read the pure sounds. Then they are asked to give examples of words including some of the digraphs they have learnt. Different ability groups are asked to give examples based on the level they have reached. Then the teacher calls each group at a time to stand up and read the words she shows them on the board. The H.A group is even asked to spell some words.' (Macbeth Primary, P2, Observation Day 8)*

Such processes were consistent in classes like the one described above. Other classes however employed similar strategies more irregularly.

Another way to differentiate according to some teachers is 'through adult input'. Specifically, as it was frequently argued, the more adults working jointly at a class the more effective differentiation can become. This is even more obvious in classes which consist of a considerable number of pupils with ASN. Indeed as St Giovanni's RC's Gifted and Talented Coordinator claimed:

> *'Classes with high levels of special needs have got, well, all classes really, have allocation of classroom assistants. And the*

more special needs there are, the more adult input there is and that's the most effective way of differentiating. Adult input.'

Despite the fact that this teacher's arguments focused mainly on pupils with SEN/ASN, it can be easily conjectured that when one or two teachers focus on the lowest end of the class, the classroom teacher will indeed be able to provide more opportunities for gifted and talented pupils to be challenged and will differentiate her instruction more effectively. As I observed during a maths lesson with Year 2, the bottom group was trying to work out two-digit simple sums with the support of a Teaching Assistant, the 'Medium Low Ability' group was doing two different two-digit sums independently, then the 'Medium High Ability' pupils worked on more complicated two and three digit sums with the support of the teacher, while the top group worked on the same task independently. (St Giovanni's RC, Year 2, Observation Day 12). Thus the presence of two educators in that class, facilitated differentiation.

It should also be noted here that although this school grouped their pupils by ability for literacy and numeracy, the groupings were flexible and pupils who were allocated to the lower ability groups but had a specific strength in one area of the curriculum were assigned harder work than their peers in the same group and vice versa (See Chapter 11). For example, as I observed one day, a boy who worked with the medium low ability group in numeracy was assigned the same sums as the top group and even managed to move to the challenge tasks at the same time as the fastest pupil from the top group. When I approached him, he said proudly: 'Look I'm doing the hard sums! I like sums and I am very good at this!' (St Giovanni's RC, Year 2, Day 12). This 'grouping flexibility' is according to Kapusnick and Hauslein (2001) one of the prerequisites for effective differentiation. Teachers should group pupils not only by level of attainment or background knowledge, but also by task, interest level, outcome and social readiness, while providing groups with clear guidelines on outcome products, group dynamics and time frames (ibid.).

Furthermore, teachers in St Giovanni's RC in order to plan their differentiated tasks most effectively frequently encouraged their pupils to assess how hard or easy they found the tasks assigned to them. There was for example a question at the bottom of their worksheet asking them to draw a circle around a sad, straight-faced and happy

face in order to indicate how they found the task they worked at. As a Year 3 teacher explained his class:

> *'I would like everybody to do a little bit of self-assessment today. Make a note of where you got stuck, what you found easy, what you think you've got to improve. If you got everything right and found it easy, then that probably means that next time you'll have to do something more challenging'. (St Giovanni's RC, Y3, Day 9).*

As I later observed in most able pupils' books, almost all have commented that the tasks were too easy for them. In fact some had even added extra comments such as the following: 'Today work was easy, I feel I need harder problems' (St Giovanni's RC, Y3, Day 9). As Bragg (2016) argued, when pupils reflect on their learning and provide teachers with feedback, they can be very articulate about the things that worked or did not work for them and can thus shed light to aspects of their learning that the teachers might have not known about.

Often within the schools studied, variations were observed in the ways teachers differentiated their instruction in the lower and upper primary school. Overall upper school teachers differentiated more frequently and in more ways than their colleagues teaching junior classes. Even in schools where not much differentiation was recorded, senior classes' teachers differentiated more regularly. Interestingly enough, even teachers who used to differentiate extensively when assigned to upper school classes did otherwise with their younger pupils. For example, as a teacher from St Hermylus's RC admitted:

> *'Again in upper school, what I did before, it was fully differentiated. We had three different maths worksheets every week, three different sets of spelling words, three different readings… Eh, in P1 only thing is different is reading. Everything else… is pretty much the same for everyone. Because the Curriculum for Excellence is very active, and we try to keep it as engaging as possible. Maths tends to be: This is what we're learning in class, repeat this at home.' (St Hermylus's RC, Interview with P1 teacher).*

It was often argued that differences in pupils' needs and 'levels of attainment' are not very prominent in the early years of their schooling and that is why teachers do not think differentiation is an imperative.

Surprisingly, even in senior classes where setting was more common, teachers were observed to be more committed to differentiation than teachers in junior or non-set classes. Tomlinson et al. (2003) highlighted that so-called homogeneous class settings (such as maths sets) are not as homogeneous as their label implies and teachers should therefore respond to the differences in their pupils' interests, competence and motivation. In line with this piece of advice, all numeracy sets in this study were differentiated into at least two levels. Teachers provided their pupils with different tasks to work on in class and at home and occasionally different worksheets to be assessed with. Furthermore, although introduction to new concepts was mainly through whole-class teaching, teachers further instructed or challenged their pupils in smaller groups when the rest of the class worked on their tasks.

The reasons why differentiation in the mixed ability classes was not so consistent or so well organised were subtly alluded to by some teachers who argued that the differences in pupils' levels are so wide that it is very hard for them to differentiate appropriately. They therefore decided to 'pitch middle' and give extra support to the less able pupils while hoping that by providing the occasional 'challenging tasks' or equivalent opportunities to their more able pupils, their needs will be catered for. George (2005) warned against the danger of overlooking gifted pupils who are perceived to do well in class without causing discipline problems. Instead, he highlighted the importance of differentiating instruction in the regular classroom. As he argued, regular classes 'can provide a real-life laboratory for the development of important interpersonal and social knowledge, skills, and attitudes essential to success in adult life, while simultaneously providing opportunity for varied types and degrees of academic achievement' (p.186), but differentiation to meet the unique needs of all learners is essential (George, 2005).

In literacy and more specifically in 'writing' tasks, differentiation followed the similar pattern in most classes observed. This particular strategy was called by some

teachers 'Differentiation through individual targets' and has been described in relevant literature as 'differentiation by outcomes' (Montgomery, 1996). Although pupils were usually assigned the same task to work on, the expectations for each pupil's work differed. To be specific, teachers gave pupils a copy of the task they had to focus on and at the top of each pupil's copy a different set of expectations or 'goals' was outlined explicitly. As a P2 teacher argued:

> *'It may be the same task, but the outcomes are different. So they might be doing, say a sheet, or even just a sentence, but as you saw today, my top group had to add the connective in there, whereas my bottom group just had to remember that there's a capital letter and a full stop and just to get a finger space in there as well. So I differentiate; the task may be the same, but the expectations are differentiated'. (Macbeth Primary, Interview with P1 teacher).*

Similarly, in School 4 where teachers issued specific literacy targets for each pupil, as I observed, one very able pupil had the following targets to reach:

> *Working towards 3c*
>
> *I am starting to know when to use the 1st and the 3d person in my writing.*
>
> *I normally write in the past tense.*
>
> *My stories have a beginning, several events and a simple ending.*
>
> *I can describe the events in my stories.*
>
> *I describe the characters in my stories.*
>
> *I sometimes choose words and phrases to interest the reader.*
>
> *I often choose interesting adjectives to help describe a person or thing.*
>
> *At least half of my sentences use the correct punctuation (capital letters, full stops, question marks and exclamation marks). (St Giovanni's RC, Year2, Day 6, Individual Literacy target sheet)*

As this pupil's teacher further explained to me, the targets ticked are the ones the pupil is expected to focus on each time. When 5 stars have been earned, the target is considered achieved and the date is recorded. When all targets on the sheet are achieved, pupils move to the next step up, which consists of different targets

altogether. A similar process of differentiation has been described by Montgomery (1996) and has been already referred to in Chapter 2 as 'differentiation by outputs'. Its main principle is that although tasks may be the same for everyone, assessment criteria (or 'targets') are different for everyone according to their needs and are made explicit to pupils in order to ensure that they know what is expected of them in order to succeed.

Teachers in Schools 3 and 4 also differentiated the tasks assigned to their class during literacy, not just by the level of support or scaffolding they provided them with. Working on the same concepts as a class, teachers in School 3 and often in School 4 assigned their ability groups different tasks from start. In these cases, the most able pupils were not expected to first complete the easier tasks before proceeding to the more challenging ones as was usually the case in Schools 1 and 2. For example a Year 5 from St Achillas's RC was doing a project on Charlie Chaplin. After looking for relevant information on their PCs they returned to their desks. They were then asked to move in a 'carousel like way' from one table to another and share their notes with the other groups. After that they joined their ability groups and the teacher assigned the following tasks:

> *'The 1st group (L.A.) will cut a picture of Ch. Chaplin and match the given facts about him with the dates on the timeline I have drawn for you. (She hands them a copy with facts about Chaplin and another with a timeline to fill the information accordingly). The 2nd and the 3d group (M.A.) will match the information they have collected with the dates on the timeline I will give you. The 4th and 5th group will create their own timeline with the information they have collected' (St Achillas's RC, Year 5, Day 4).*

Moreover, all schools with the exception of School 5 differentiated their 'reading groups' in literacy. In most classes pupils were grouped in 5 reading groups depending on their 'reading levels'. Then each group was assigned a different book to read and different relevant tasks to work on. As a teacher explained,

> *'We have the reading groups, where there are five groups of pupils working at different level. For example we have some books which are stage 7, others which are stage 8 or even 10. And it depends, every two to three weeks they change books*

> *and they've also got work to do in their reading groups.' (Macbeth Primary, Interview with P3 teacher).*

In spelling, almost all teachers provided their classes with three different sets of words. In most cases the class would work on the same pattern, for example words ending in –ing, but each group would have to learn different words, depending on their level. Some teachers had stable spelling groups, where the 'top group' would always work on the hardest words, while others assigned each pupil a different set of words depending on the score they got on their most recent spelling test. Only Da Vinci's did not seem to have an organised system for spelling. For example, one teacher admitted that he doesn't 'know how to teach pupils to spell' and thus paired able with less able pupils in order to teach each other. Other teachers provided their class with different lists of words but these lists appeared to consist of random sets of words instead of words aiming to teach them a specific spelling pattern.

Homework and assessment were only differentiated in a minority of classes. Most teachers assigned their pupils homework with the aim to consolidate the skills that the class had been working on during the week or test the degree to which pupils had grasped the concepts introduced in class and therefore plan their teaching accordingly. These tasks were always pitched middle, in order to, as it was mentioned, allow 'higher ability children to work independently, middle ability children work under the supervision of a parent and lower ability children with the support of their parents.'(St Giovanni's RC, Interview with G&T Coordinator). As a teacher from School 4 further argued:

> *'I rarely differentiate in their homework….It depends on the job really. If it's just a bit of consolidation, well to be honest a lot of the homework is used for assessment. So if we're doing shape throughout the week, I'll give them a task on shapes for homework. Come back, I will take the marks from that and I will be able to see who's got it and decide what each group should work on in class. I mean, you've obviously got to take into account that they'll probably get a bit of help at home. So you've got to be careful with that, because it can be misleading. Occasionally I differentiate, but not every single week.' (St Giovanni's RC, Interview with Y3 teacher).*

Nevertheless, some teachers mainly from School 3 and 4 set different expectations for their open-ended tasks to each ability group explicitly. Likewise, assessment was the same in the great majority of classes and as teachers explained, it was always pitched middle, in order to inform teachers to what degree their goals for each topic were achieved. However, as Kapusnick and Hauslein (2001) underlined, homework and assessment should be designed to extend all individuals' understanding and skill levels not just to test what they have learnt.

Teachers in St Achillas's RC were very committed to differentiation and differentiated all subjects into at least three ways. The rationale underpinning this commitment was that every child has different strengths and weaknesses and it is therefore impossible to serve their needs unless you provide them with suitable assignments. As a teacher argued:

> *'I used to teach Year 2 for 7 years, but every year I used different resources because the children were different. So it had to be tailored for the needs of that particular class. But I am a massive advocate for differentiation, because if you are not aiming at the child, they are never going to achieve and they are never going to progress, so that's what I'm trying to do.' (St Achillas's RC, Interview with Y5 teacher)*

Frequent assessments served as a basis for teachers to judge which targets to set each pupil. This has been more thoroughly discussed on Chapter 7. Based on these assessments, teachers planned the concepts and activities to be introduced to each ability group. What is more, teachers in this school, as a Year 5 teacher professed, differentiated even within each ability group or set: 'Parents in this school are quite supportive of this, because they know that their children are getting the work tailored. Because, even though they are in groups, we still differentiate within the groups as well. So it is a lot of right from the top down differentiation.' Indeed, as I observed, the Year 6 top set in maths, which consisted of only 10 pupils was differentiated three ways and the Year 5 set of 12 pupils was differentiated 2 ways, because as the teacher explained differences among those pupils were not that prominent.

Often, in classes where teachers regularly differentiated, gifted and talented pupils were accelerated. That is they were introduced to and focused on concepts

which were part of the curriculum for the next year group. This was much more common in English schools, whenever teachers felt that the normal curriculum was too easy for their most able pupils. Nevertheless, as it has been alluded to earlier in this chapter, teachers in St Giovanni's RC were instructed that in line with the requirements of the most recent curriculum in England, they should not accelerate their pupils. As some teachers argued, this limits the extent to which they can differentiate effectively. For example a Year 3 teacher reported that:

> *'Especially now that we are at the end of the year, some of the children (pauses and exhales heavily) know their written methods for maths quite well, and they have done quite a lot of problem solving. Other children need a bit more consolidation just of the basic methods to actually do the sums. But the way the new curriculum works for our top group… Well it kind of ties our hands, because we can't just give them staff for Year 4, I can't give them bigger numbers and things like that. I've got to try and expand their knowledge and we do that by problem solving rather than by just moving them to the next level straight away. But I have been doing that for quite a while now, and you know, at some point this reaches a plateau.' (St Giovanni's RC, Interview with Y3 teacher).*

On the other hand, Scottish teachers, as it has been argued earlier in this chapter, were quite reluctant to introduce any material suitable for a higher year group despite the fact that they did not hesitate to set their less able pupils tasks suitable for younger pupils. As has been discussed already, however, several educators agree that when pupils have mastered the concepts introduced in class, they should be offered the opportunity to proceed at an accelerated pace, otherwise the risk for them to be demotivated is high (Kapusnick & Hauslein, 2001).

Differentiation in topics other than literacy and numeracy was hardly ever observed in Schools 1, 2 and 5. The English Schools 3 and 4 however, often provided their pupils with well-planned differentiated activities in most curricular areas. This made even more sense in those tasks which required good writing skills. For example during a science project on 'The sinking Plasticine', all pupils carried out an experiment in mixed ability groups. When however the teacher asked them to complete a worksheet recording the process they followed and the conclusions they arrived at, the task was differentiated three ways. As I recorded on the day:

> *'The 1st group is given a sheet where the 'you will need', 'what to do' and 'how to make it a fair test' sections are answered. They are asked to fill in the 'results' section, drawing 'the shape of each plasticine shape you tested and writing next to it how long it took to reach the bottom of the bucket', and then the conclusion section answering the question: 'which kind of shapes san the quickest and which sank the slowest?'*
>
> *The 2nd and 3d groups are asked to work on a sheet, where the 'you will need' and 'what to do' sections are answered. They have to tick the correct answer for the sections 'how you will make it a fair test' and 'which shapes do you predict will take the longest to sink?' and then fill in the phrases in the 'results' and 'conclusions' sections.*
>
> *The 4th and 5th groups are given a sheet, where they have to copy the sections 'you will need' and 'what to do' from the board, and work out their answers to the questions 'how will you make it a fair test', 'prediction', 'results' and 'conclusion' independently.' (St Achillas's RC, Y5, Day 5).*

School 5 was the case were differentiation was observed the least frequently. Despite the fact that teachers argued they were fully aware of the different needs and strengths of their pupils and made sure they provided for them, only spelling was regularly differentiated. Tasks assigned to pupils either in class or as a homework were almost never differentiated. As a teacher argued:

> *'It's a real struggle to know where to pitch, because you can only do a bit of differentiation. And then you have to decide where to pitch the lesson. You know, I have this rule of trying to pitch at the top third, just at the bottom and the top third sort of thing. But if somebody finishes too soon, they need something meaningful to do, otherwise it's boring. But then it gets very complicated' (Da Vinci's School, Interview with Y5 teacher).*

From this statement, one can fathom that teachers in this school were quite inexperienced with differentiation, despite supporting it in principle. As Hertberg-Davis (2009) pointed out, many teachers perceive differentiation as highly time consuming and demanding. Thus they opt for the less complicated choice of a 'one-size-fits-all' curriculum (p.252) with minor modifications to support those who struggle. Indeed, whenever teachers in this school were observed differentiating instruction or tasks or even discussing about differentiation, they focused on the needs of the less able children. For example, when a Year 2 teacher was asked how she

provided for the needs of her most able pupils, she answered 'with differentiation', but when she was prompted to explain this, she only gave examples of the ways she supported her pupils with ASN:

> *'This boy has just joined us from a state school. As you have observed he is different from the rest of the class, he doesn't handle his emotions very well. But everyone here is aware of his 'distinctiveness' and behave absolutely normally in front of him. They accept him as he is, despite his frequent outbursts of emotion and try to help him feel part of the whole class. And I have achieved all this with differentiation.' (Da Vinci's School, Interview with Y2 teacher).*

In addition, the following observation from the same class further demonstrates the argument that differentiation in this school was used mainly to support their less able pupils:

> *'The whole class is practising the six times tables. At least four pupils are very confident with it. Then the teacher asks two girls who were struggling to practise the two times table with her, walking from one end of the classroom to the other and counting every two steps. Then the teachers repeats this with another two pupils walking up and down the class in fours. The rest of the class sit quietly observing them. In the end, the teacher does not provide anything more challenging for the most confident pupils.' (Da Vinci's School, Y2, Day 6).*

Finally a most revealing example is the following discussion between a Year 6 teacher and me:

> *Me: Does she still feel she is being challenged or does she feel that in some topics, such as in maths she's better than others? I mean, yesterday for example, she seemed to be very confident with the tasks you gave her and she completed them quite faster than the rest of the class.*
>
> *He: That's generally how it is. She gets things quickly and she can do it. But I always have to make sure that I've got something in case she finishes early. Yesterday she finished pretty well at the end of the lesson, so it wasn't too bad. But sometimes she's so quick, she finishes early and I have to make sure I've got something to keep her busy with.' (Da Vinci's School, Interview with Y6 teacher).*

It is obvious from the above that it did not even cross this teacher's mind that assigning this pupil a task tailored to her needs would be the most effective way to

nurture her abilities rather than making sure he has something 'to keep her busy with'. Finally, based on the above mentioned observations of and responses from Da Vinci's School's teachers, it could be argued that more training in differentiation and support of teachers' professional development is required to enable them to achieve the multifaceted and complex work of tailoring instruction and tasks to all pupils' needs (Hertberg-Davis, 2009).

To conclude, although differentiation is definitely a rather popular strategy and has been cited in the literature as one of the most effective ways to cater for the needs of gifted and talented pupils (George, 2005; Hewston et al., 2005), it can be proven quite futile unless the ultimate goal underpinning teachers' to implement it is to cater for the needs of the gifted and talented pupils (along with all other pupils) and is combined with equivalent strategies which nurture their talents. As Hertberg-Davis (2009) eloquently stated:

> *Misunderstandings about differentiation—that it is a form of scaffolding for struggling learners rather than a method of meeting the unique needs of all levels of learners, that it is primarily a group work strategy, that it is about providing fun choices rather than a thoughtful, concept-based curriculum—are prevalent in teachers new to differentiation and can lead to practices such as using gifted learners as anchors in group work to "make sure work gets done," using gifted students to help tutor other children, or sacrificing high level content for cute activities. These and other early misuses of differentiation can actually make the regular classroom a less challenging place for gifted learners, pointing to the need for thoughtful ongoing professional development to make differentiation a viable option for educating gifted students.*

Having analysed two of my study's most popular methods for gifted and talented education provision, I will proceed with an analysis of the remaining methods in the following chapter.

Chapter 10 **Provision (Part 2)**

As it was mentioned at the beginning of the previous chapter, two of the most frequently cited responses to the question of gifted and talented education provision was what was coded as 'Different Opportunities' and 'Peer teaching'. In this chapter, I will first analyse these categories and then briefly refer to teachers' secondary responses and the allocation of resources.

10.1 Different Opportunities

The importance of offering gifted and talented pupils 'different opportunities' was acknowledged by most participants in this study. Some schools, such as Da Vinci's School and St Achillas's RC were highly committed to this strategy. Several of these 'opportunities' have been mentioned in different parts of this thesis. It should be noted here that they were always introduced as an inclusive policy aiming to cater for all the pupils' needs. Teachers however, recognised that a secondary benefit deriving from the implementation of such strategies is the fact that they enable more able pupils to be challenged in 'different to the usual ways'. Freeman (2011) has referred to opportunities such as mentorships, summer schools and after-school activities as 'supplementary learning opportunities'. Hewston et al. (2005) however defined them as 'enrichment', i.e. the 'broadening' of the curriculum in order to increase pupils' choices and widen their experiences. Such activities may include school trips, research projects, specialised classes or summer schools. Although the academic benefits of these opportunities are hard to ascertain due to the huge variety of approaches labelled as such and offered in and out of schools, it has been argued that they create a positive learning environment, provide social learning and can improve pupils' interpersonal relationships (Hewston et al., 2005). In the following paragraphs I will use the term 'different opportunities', as it was chosen by most participants, and refer to both the most popular and most original ones.

One of the strategies introduced by St Hermylus's RC is 'pupil voice groups'. Older pupils in the school were encouraged to voice their opinions on important

matters relevant to their daily school life. They discussed about the school facilities, their learning, their break times, school trips, bullying or the school fêtes. According to the school's deputy head teacher:

> *'I think that's something the more able will benefit from. They, will have the opportunity to voice their opinions, to problem solve and to discuss all this with their teachers. I think the school is making a lot of progress in this direction.' (School 1, Interview with deputy head teacher).*

Allowing older pupils to take ownership of their education by encouraging them to make meaningful choices about their learning has been reported to lead to higher self-efficacy and to improve academic performance. In order for this strategy to be effective, pupils need to understand their rights and responsibilities, have an awareness of their strengths and weaknesses, know the available opportunities and options and cooperate with advocates who can help them accomplish what they need to (Douglas, 2004). Unfortunately however, I did not have the opportunity to testify to the advantages of the implementation of this strategy as I was never able to observe it. Apparently, the school had just introduced these voice groups when I started my observations and either the meetings had not yet taken place or the head teacher was reluctant to invite me to any of them. If these meetings are not regular and well-organised with the aim of enabling pupils to take ownership of their learning, but rather occasional meetings planned only to give pupils the illusion that they can play an active role in their schooling, they will not have the desired outcomes.

'Different opportunities' were often given to pupils in the 'topic' or 'project' (history, science or geography). As Smith (2005) underlined, 'project work is an opportunity for children to investigate topics that are of genuine interest to them [and are] situated in real life' (p.62). Teachers in most schools appeared to be more relaxed about time management and coverage of the curriculum and were more flexible, encouraging pupils to take up several challenges and initiatives through the various projects they focused on. Being flexible in their expectations of the amount and content of work pupils should cover in the topics as well as the structure of the lesson, gave more able pupils the freedom to explore topics they had a keen interest in, in greater depth than usual. Furthermore, limits to the extent to which pupils were allowed to

explore a topic were not set as was often the case in numeracy and literacy. Pupils were also allowed to progress at their own pace. All these provided an outlet for the more able pupils' creativity. And as Mills (2003) reported, teachers who are flexible and create a learning environment of high expectations where pupils are encouraged to pursue their interests and are given the necessary avenues for learning, are very effective in catering for the gifted.

For example, a few able P6 pupils from St Hermylus's RC designed their own wind turbines and carried out several experiments as part of their renewable energy systems topic. Then, the teacher took them on a visit to one of the local high schools to conduct further experiments at the school's wind turbines. Similarly, St Giovanni's RC Year 6 focused on a project on the 1st World War for several months. For the purposes of their project, pupils conducted research on a specific soldier, the teacher's distant relation, and tried to gather information about his family using genealogy websites and census records, they drew maps of the route his regiment might have followed, researched the major historical events which took place during the war, examined the reasons which led underprivileged men like him to enlist, the consequences the war had to his family and the cities and villages which were left to fend for themselves with no men, and the women's role in the war and their post-war fight to equal rights. The pupils made posters inviting possible soldiers to join the army, they wrote poems to praise the soldiers' battles and give them courage to carry on, and wrote articles that could have been published at that time in order to raise the people's morale. Activities like the ones described here not only expose pupils to new topics and field of knowledge, but also promote their investigative and critical thinking skills, their imagination, curiosity and creativity, by encouraging them to assume the role of a 'first-hand inquirer' (VanTassel-Baska & Brown, 2007). Moreover, experiential activities such as the ones observed in these schools, enable pupils to become direct participants in their learning and if they are cognitively challenging, they result in successful learning for all pupils (Montgomery, 1996). Yet, in other cases, such as Da Vinci's School the development of systematic knowledge about historical events or the laws of physics was restricted to the unsystematic investigation of pupils and not supplemented by it. In fact as Smith (2006) maintained, schools tend

to overemphasise the 'collection and presentation of data' when they should be focusing on 'establishing existing expertise, planning and the interpretation and evaluation of data' instead (p.66).

Nevertheless, the great majority of my observations took place during numeracy or literacy both because teachers assumed I was interested in observing these lessons exclusively- as they almost always told me when we first made appointments for me to observe them- and because they devoted more timetable hours in these two curricular areas. Similar observations have been made by Bailey et al. (2012) who argued that some teachers tend to have a narrow view of high ability, which is restricted to linguistic and mathematical aptitude. Even in the example of Year 6 I cited above, the teacher admitted that she had 'left the project aside' for several months in order to prepare her class for the upcoming SATs and I only happened to observe her class when they had just resumed their project work. As a result, I observed a rather small number of 'topic' or 'project' sessions overall and have only offered a very partial description of the whole picture.

Another quite common way of providing more able pupils with 'different opportunities' was through participation in competitions, usually organised by private organisations or NGOs, which aim to promote gifted pupils' talents in specific academic areas, such as numeracy, science and less frequently, literacy. As Mönks and Pflüger (2005) most European countries encourage gifted pupils to participate in school intern or extern competitions. Indeed, most of the senior class teachers I observed encouraged their highly able pupils to participate in competitions. The most common of all was, unsurprisingly, mathematics competitions, such us the 'Primary Mathematics Challenge' and the 'Olympiads'. Although participation in competitions can have a motivating effect on pupils, can further young talent and improve pupils' self-concept (Hermann & Nevo, 2011), it may also create goal-oriented behaviours to learning (i.e. the desire to win and be proven superior to others), rather than 'task-oriented' behaviours, which are more constructive in that they aim at self-improvement (Shapiro, Schneider, Shore, Margison & Udvari, 2009). It might also be argued that participation in competitions is a rather fragmentary way to nurture gifted pupils' abilities, which mainly celebrates the few winners' extraordinary talents. In those cases

where gifted and talented pupils' needs are not taken into account in a regular and consistent way, a participation in competitions once or twice a year is not only insufficient but might also be counterproductive in the event that a gifted pupil's rare chance to shine proves futile.

Throughout Macbeth Primary and in some classes from St Hermylus's RC teachers stated that their pupils watched the news on CBBC in class on a daily basis, and that generated deep conversations about the current affairs in Britain and the world. This as some teachers argued is especially interesting to gifted and talented pupils and even more so to those who come from underprivileged backgrounds where conversations about the world news with the family are not very common. Indeed I often observed classes watching the news at the beginning of their lesson. For example, a P1 from Macbeth Primary watched the news about the first official British astronaut to go to the International Space Station, or the news about a thousand people working in factories making steel in the UK who lost their jobs when the factories closed as a result of their inability to match China's low prices. Although watching the news could potentially generate conversations about real problems and thus stimulate children's critical thinking (Montgomery, 1996), that was rarely the case. In fact, in most cases pupils watched the news silently while drinking their milk when they returned from their break, while the teacher marked their books or prepared the room for the next lesson. Therefore the news on CBBC were used mainly as a way to keep the class quiet while the teacher was otherwise engaged. Very rarely did any discussion commence about whatever the pupils were watching on the news and in the rare cases when this did happen it was though the pupils' initiative and teachers did not encourage it. On the contrary they were usually keen to move on with their 'actual' teaching.

Another alternative way to provide for the needs of the gifted and talented pupils, more common in English schools, was through offering a wide range of extracurricular opportunities. According to St Achillas's RC deputy head teacher these opportunities not only nurture pupils' talents, but most importantly they help uncover their potential in those areas where they might have remained veiled had these opportunities not been offered to them in the first place. Such opportunities were offered for music, dance, singing, various sports, theatre, handwork, painting and so

forth. When these opportunities took place in the after school clubs, they were accessible to everyone on a first come first serve basis, required a modest fee and no selection took place. When on the other hand, these opportunities were offered during the formal timetable, a limited number of pupils were selected to attend these classes and they would spend some time off their class in order to be given specialist teaching in one of the areas mentioned above. These opportunities were offered to pupils for free, no previous experience was required and selection was organised and carried out by the specialist teachers assessing pupils' 'talent'. These opportunities were considered especially beneficial to underprivileged pupils who would not otherwise have a chance to develop these talents.

In Da Vinci's School, as it has been mentioned earlier, these opportunities consisted an important part of the school curriculum and were therefore offered to everyone as a class lesson. Such lessons were 'eurhythmy', 'gardening', 'handwork/woodwork', 'music', 'French', 'German', 'drawing' and 'knitting', and were taught by specialist teachers but no sports lessons were available. The following extract from my interview with one of the teachers sheds light to the reasons why this school endows their pupils with so many 'different opportunities':

> *'You know, there's a temptation with a bright child to just give them more intellectual work, you know. I don't think that's healthy. I think, you know, you have to balance it with artistic work, challenging them in totally different ways, their hands on work, hands on woodwork… Again, it's challenging them in different ways so they become balanced. And yeah, I think if we push the intellect too much, I think we are in danger of perhaps… leading to situations where someone is so bright but something isn't there. They don't have that moral responsibility, perhaps? Or awareness of other people, which is so important as well.' (School 5, Interview with Year 7 teacher).*

I was admittedly very impressed by the range of opportunities offered to all pupils at this school and the quality of the work (drawings, plays, crafts etc.) produced. Creative pupils or those musically talented were given every possible avenue to develop their talents. Nevertheless, the above quotation indicates a certain degree of scepticism or even antagonism towards the 'intellectually' gifted child which partially

explains the reasons why this school provided very few opportunities to these pupils. As it has been argued in Chapter 7, gifted pupils often experience peer or even teacher antipathy consequent upon their intellectual aptitude especially where an 'ethos of appreciation of academic achievement alongside other achievements' is not maintained (Phillips & Lindsay, 2006, p.69). Therefore views such as the above are rather upsetting. However, as is obvious from this interview, this teacher's reluctance to further challenge intellectually able pupils is associated to a faulty perception of gifted pupils as emotionally defective and socially handicapped. Persson's (2007) study of gifted individuals' socioemotional behaviours demystified those myths surrounding intellectually gifted and counter argued that when they do face such difficulties they result from 'constant rejection in their social context and the consequent feelings of alienation' (p.31). Therefore, teachers who care about the socioemotional development of all their pupils should not resist to the academically gifted pupils' intellectual growth, but embrace it.

Another interesting example which was only observed in St Giovanni's RC was the writing and performance of a play which was embedded in the literacy lessons. Pupils were first asked to write the script for the scenes of their play, using stage directions. Then each group voted the best script amongst them and another group was assigned the rehearsal and performance of the play. The pupils would go to an empty class or a quiet place within the school, accompanied by a teaching assistant. They decided how to share out the roles, learnt the script, made some props and rehearsed it. They then joined their class and performed the play in front of their teacher and peers. In the end, the class was asked to write a review, evaluating both the script and its performance. Noteworthy is that the higher ability groups' scripts were given to the lower ability groups to perform and vice versa. As the teacher later explained to me, the purpose of this was twofold: first to make sure that all pupils performed a play which they were not familiar with and second, to make sure that 'less able pupils had a chance to perform a well-written script' and the 'more able pupils would be challenged to improvise and make a less skilled script work' (School 4, informal chat with Y4 teacher). Although at first I doubted the benefits of this strategy to the most able pupils, I later observed them practising the rather mediocre script assigned to them

and their efforts to make the best of it and they were being very creative. For example one of the main characters was a spider which had only a couple of lines to perform. The boy who was assigned this role however, was imitating the movements of the spider quite successfully gaining a big round of applause from the class. As VanTassel-Baska and her colleagues (2002) have argued, provision for gifted pupils in the language arts is usually limited to the assignment of advanced reading materials, which if not combined with inquiry-based instruction aiming to promote critical and creative reading behaviours is not fruitful. They moreover declared that when reading and writing tasks are combined with multiple strategies such as independent study, inquiry, group work, teacher and peer feedback, and when a writing task has a genuine purpose and live audience as in the case described above, it can nurture pupils' creativity and enhance their writing skills (ibid.).

10.2 Peer-teaching

Another method often mentioned by teachers as promoting the needs of their more able pupils and even more frequently observed was 'peer-teaching'. Relevant literature alternatively refers to 'peer-teaching' as 'peer-tutoring' (e.g. Coenen, 2002) or 'peer-assisted learning' (e.g. Topping & Ehly, 2001) and although widely regarded by teachers as beneficial, its effects to gifted and talented pupils' learning are controversial (Robinson, 1999). In my study this strategy was widely employed in all schools except for St Achillas's RC, where it was never employed or indicated as good practice. As 'peer-teaching' I have coded all the strategies which involved pupils of either the same or different age and of similar or different abilities teaching each other some skills within the school. In some cases, peer-teaching took place in assemblies or during the break and related to social skills mainly, in other cases it took place during the lesson and related to thinking or problem solving skills. Always, however, peer-teaching was introduced and promoted by teachers and members of staff at school and it took several forms; it might be pupils marking or giving feedback to their peers, it could be pupils explaining a difficult task to their 'learning partners' or even pupils supervising the work groups did in order to assist their teacher manage the classroom. In most cases, the role of the 'tutor' was undertaken by the 'more able pupil' and the role of the 'tutee' by the 'less able pupil'.

The rationale behind this strategy was most eloquently described by a teacher from Da Vinci's School:

> *'Well, there is a proverb… If you would forget, read about it, if you would remember, do it, if you would master it, teach. And I think it's a couple of things: one is it helps your self-esteem and also when you have to explain something, it really clarifies it in your own head. You have to know what you're talking about really well and if it's just going through a formula, well you can do that, but if they are making mistakes that aren't obvious from the formula, you have to think even more, so it's actually stimulating them to problem solve.' (Da Vinci's School, Interview with Y3 teacher).*

In fact, the above statement is the only one which clearly highlights the perceived advantages of the employment of this strategy to the more able pupils. Similar arguments have been raised by Slavin (1990) who claimed that the process of explaining a concept to peers, 'builds deeper understanding in the explainer' (p.6).

With the exception of the previous example, whenever participants in this study referred to this strategy they originally argued that it was employed for the benefit of the more able pupils rather than the less able ones, when however they were further prompted, the reasoning they gave supported the argument that this strategy was implemented with the less able pupils mainly in mind. For example, while a teacher from St Giovanni's RC was arguing that working in what he called 'high ability-low ability partnerships' could benefit the more able pupils, he admitted that the most direct effects of this strategy were to the benefit of the less able partner. As he added,

> *'It's good for the higher able too, the more able pupils, because they get to feel like teachers in a way, it's a chance to show off really (whispering), 'I know how to do this, I will help you do it' and sometimes it adds up a little bit of reinforcement. But it mainly helps the less able pupil get the one-to-one support they often need. And you know, every now and again you find that a child looks at something in a different way from you? And you try and explain it every way you know, and you think, 'why don't they get it? It's a perfect explanation (laughing).' But because a child has worked out their own way, they can explain it to the other child and something will click'. (St Giovanni's RC, Interview with Y3 teacher).*

Similar observations have been made by Topping and Ehly (2001) who reported that teachers employing this strategy believed that gifted pupils can understand their peers better than they do and that by helping them learn something they are stuck with, they become more patient, improve the whole class's performance and feel a sense of fulfilment.

This belief that more able pupils can teach their learning partners effectively in combination with a conviction that they 'drag their less competent peers up' by working with them (St Giovanni's RC, Interview with deputy head teacher) directed teachers' decisions about setting versus mixed ability teaching as well as their seating arrangements. Indeed those teachers who strongly believed that less able pupils can benefit from working closely with a more able classmate were much more likely to opt for mixed ability groupings, introduce 'learning partners' or share with their most able pupils some of their own responsibilities to oversee a number of pupils' work and give them feedback when needed. Neber, Finsterwald and Urban (2001) also observed that 'group composition' was associated with a belief that gifted pupils working in heterogeneous groups offer higher quality explanations to their peers. A teacher from Da Vinci's School, for example, had placed his 'brightest pupil' right at the centre of the class in order to be able to help those sitting around her. Similarly, a Y6 teacher from St Giovanni's had arranged her class in 'rank order' so that on one side of the 'top table' was sitting the class's top pupil and at the bottom end of the 'lowest table' was sitting the class's weakest pupil. As the teacher explained, the groups were very close one to another so that the top pupils of the middle ability group, for example, would be supported by their more able peers sitting on the table to their right and they would be able to help their less able ones sitting on the table to their left. Finally, although most classes in Macbeth Primary were instructed in small ability groups, when they were assigned a task, they were asked to sit with their (different ability) learning partners in order to be able to help each other.

In some cases, as it was mentioned above, what was coded as 'peer-teaching' took place during the break. For example older pupils from St Hermylus's and Da Vinci's School were responsible for supervising younger pupils playing in the school yard. They were asked by their teachers not only to set an example of good behaviour

but also to intervene whenever anyone was involved in a dispute and try to resolve it as peacefully as possible. What is more, when the weather was bad and pupils were asked to spend their breaks in class, P7 pupils were asked to supervise the youngest pupils in their classes and entertain them by narrating stories, organising games and so on. I was astonished to discover that both the senior as well as the junior pupils took this very seriously and enjoyed the process very much. Senior pupils did not attempt to avoid their duties, on the contrary they were quite excited whenever they were assigned the task to look after the P1 or P2 classes and the junior pupils respected their young 'teachers' and were very fond of them too. Something rather similar took place in most schools during their 'Assembly' meetings. Older pupils took turns in helping their teachers supervise all classes. As a deputy head teacher explained to me, this process sends younger pupils the message that 'behaving properly' is not an unreasonable expectation only teachers and parents share, but something that more mature pupils expect too. Furthermore it reveals older pupils how challenging it is to deal with a large number of pupils and manage to teach them something meaningful at the same time (St Hermylus's RC, informal chat with P7 teacher).

Another similar strategy implemented by all schools except for Da Vinci's School was the 'house buddies'. This strategy was more fully described by teachers from St Hermylus's RC. According to this, pupils from P7 were buddied with pupils from P1. The older pupils' duty was to bond with the younger ones, help them integrate in the school society, protect them and teach them some helpful skills at the same time. Every week P7 pupils were responsible for planning and implementing a game with the P1 pupils. As a teacher from this school further explained:

> *'Their responsibility is to support the Primary Ones and lead them by example. And again the Primary Ones are there not only to learn but to get to know them too and become more like buddies and everybody is grouped in their house system. Of course this gives more able pupils the opportunity to nurture their leadership skills, improves their social skills and teaches them both how to work with their peers and handle a group of younger pupils with different needs. It's teaching them empathy, lots of different things.' (School 1, Interview with P1 teacher).*

Furthermore, at the end of each of these 'buddying' sessions, P7 pupils returned to their class and evaluated the degree to which their aims were met, whether any unforeseen issues they should have dealt with occurred and finally planned again their work for the following day. They were given tables to complete, detailing the activities they would introduce and the exact time they planned to spend on each. Having observed quite a few of these buddying sessions, I admit that I was rather impressed by how seriously all pupils took the planning and execution of these sessions. They were highly motivated and always cooperated with their peers effectively in order to carry out an enjoyable and educational session for their younger buddies who most definitely enjoyed and looked forward to it. One day for example, I observed the St Hermylus's P7 pupils spread across the two P1 classes and the cloakroom and work with small groups of P1 pupils under the relaxed supervision of their teachers. The P7 pupils had crafted several pairs of shoes on old cardboard boxes, they had painted them with bright colours and put real shoelaces on them. The purpose of this activity, as a teacher explained to me, was to help younger pupils develop their dexterity by teaching them how to tie their shoelaces. As I observed on that occasion, both P7 and P1 pupils worked hard and patiently in order to achieve their goal and enjoyed the process too. Despite such strategies' obvious advantages, i.e. teaching pupils to be patient and respect others or heightening gifted pupils' empathy towards their younger or less able peer (Coenen, 2002), one wonders what the academic benefits of the long-term employment of such strategies to gifted and talented pupils can be. As Topping and Ehly (2001) pointed out, when 'tutors' are not cognitively challenged, they benefit academically much less than the 'tutees'. It is therefore justifiable to argue that practices such as the ones described here, which have been termed as 'character education' in the relevant literature (Berkowitz & Hoppe, 2009) may be beneficial to gifted children if employed as a short-term intervention aiming to develop moral values, improve pupils' behaviour, respect or relationships but might be superfluous on a permanent basis.

Peer-teaching was also very frequently used by most schools in class. One rather common aspect of it was employed through peer-assessment and feedback. Specifically, pupils were often asked to either mark their partners' work- usually

something straightforward such as spelling or a numeracy test- or give them feedback on something more complicated such as a story. The former was obviously used to save teachers time from marking and teachers did not claim it offered any significant benefits to either the more or the less able pupils. The latter however proffered several positive outcomes for all pupils. In many cases for example I observed teachers asking the class to read their learning partners story and then based on the (individual) 'success criteria' evaluate their work. Usually pupils were asked to write down two thing their 'learning partner' did well and one that they should improve, a strategy which some teachers called 'two stars and a wish'. As a Year 7 teacher explained her pupils once, 'your peers will help you assess your work by being more objective than you are, and being at a distance from the piece of writing they assess, which allows them to grasp more things' (St Hermylus's RC, Y7, Day 6). In addition, peer-assessment can potentially enable pupils to realise how a task is being evaluated and how important it is to be aware of the 'success criteria' or else the desired learning outcomes (Eyre, 2001). Indeed, as Topping and Ehly (2001) pointed out, 'peer assessment is reflexive, and focuses the peer assessor's own mind on what actually constitutes "good" work in the area. A clearer view of "what you have to do to be right" is likely to improve assessed performance, especially when the criteria for assessment have been discussed or negotiated with all participants. Peer assessment can thus be a vehicle for improved self-assessment' (p.118). In my study, this strategy was mainly used with older pupils, but some teachers used it with younger pupils too. For example, as I observed at a Y2 the teacher asked her pupils to write an opener for their story: 'The magic foot'. Then she instructed the class to give their opener to someone near them 'who will read it, assess it and give you kind but honest comments'. Some of the comments the top group made on their peers' openers are the following: 'Well done, I want to read it, but explain the setting a bit better' or 'Very good, but I hope you are going to put in the magic foot in your story soon' (Indeed this pupil hadn't written anything relevant to the title yet), or 'Very good vocabulary and use of time conjunctions' and 'Very scary! Also good words and neat writing!' (St Giovanni's RC, Y2, Day 12).

In Macbeth Primary I came across a rather extreme example of what was called peer-teaching, but might as well be described as teacher-assistance. Primary 4 had very recently been assigned a new teacher, replacing a colleague on maternity leave. The new teacher however, as she very unreservedly admitted to me, was quite inexperienced and felt overwhelmed with her challenging class. The head teacher therefore advised her to get help from her most able pupils in order to manage the more 'difficult' ones. As she declared: 'I usually choose those very able pupils who finish their tasks early to help their peers get on with their work. And it works quite well! And it helps me in terms of time management'. When asked what pupils thought of this strategy, she further argued that they like it very much and that they do not mind helping or being helped by their peers at all (Macbeth Primary, Interview with P2 teacher). To the teacher's defence, there were a few pupils in her class with quite serious learning and/or behavioural difficulties. Still, her attitude indicates that she felt the needs of her least able pupils were more important than the needs of her most able ones, who instead of being assigned tasks tailored to their abilities, they were assigned easier stuff which they were able to finish in little time allowing them thus to help her with the classroom management. Similarly, in St Giovanni's Y5, the teacher had asked one very able pupil to help a classmate with fine motor difficulties and was writing extremely slowly with her writing tasks. Thus as the pupils explained to me, whenever the very able one finished her writing, she took over for her friend. Or as a teacher from School 5 disclosed to me, in order to 'challenge' his 'brightest' pupil who was perfect in spelling:

> *'You know what, I've always been good at spelling myself but haven't worked much on that with this class, because I don't know how to teach people to spell. So what I did was give them a spelling test. The difference among the pupils' levels was huge. There was Evie [the one referred as his brightest pupil] who got everything right and Tom who got only one right. So I decided to group them in pairs of high and low ability and their task is to help each other learn their words. In this case, Evie will have to help one of the boys who scored lowest; this will be a good challenge for her as she already knows all the words. She can get any word I give her right, so there's no point in teaching her something new. And in the end they will all be tested on these words and the mark they will get will be*

the mean of the pair's scores' (School 5, Interview with Y7 teacher).

The latter may be quite shocking in revealing how teachers sometimes make up for their own inadequacies by using their most able pupils as assistants, under the convenient misapprehension that this is for the benefit of their gifted pupils. Persson (2010) described this phenomenon as turning gifted pupils into 'servants'. As he argued, 'being an assistant presumes cooperation and that there is a plan to follow decided by the teacher, which also has some meaningfulness. Student and teacher share a responsibility together' (p.551). However, in the cases described above as well as in Persson's (2010) study, peer-monitoring or peer-assistance tasks assigned to more able pupils were not meaningful or challenging to them and their main purpose was to either help the teacher or keep a more able pupil busy.

Although these cases were quite remarkable they were not very rare. Many teachers encouraged their pupils to act as teacher assistants, though in a less regular manner and to a lesser extent. Still, in most cases when teachers asked their pupils to work with their 'learning partners', they assigned a task to them and reminded them that if they get stuck somewhere they must first solicit their partner and only if they are unable to help them refer to the teacher. For example, I observed in most of Macbeth Primary's classes a poster on the wall with the steps pupils should take whenever they are stuck on a given task. According to it, pupils should:

Brain: Think about prior learning
Book: Look it up
Buddy: Ask a classmate
Boss: Ask the boss, adult or peer. (School 2, Day 6, P5).

In some cases, the advice given by a peer was really helpful. For example, a very able in maths P1 pupil, Jay, was asked by his learning partner to help him figure out the answer to the question _x2=14. Jay first invited him to 'think of a number which doubled gives you 14' and when this did not work, he suggested to him to try the double of 5, 6 etc. until he gets his answer (Macbeth Primary P1, Day 11). This advice was quite impressive coming from such a young pupil and supports the teacher's argument that 'this is an extra challenge for my more able pupils, because it

is hard to explain the process to solve a problem. It is always easier to give them the answer, but they are not allowed to' (Macbeth Primary, Informal chat with P1 teacher, Day 1). However, most pupils in this class tried to help 'without giving the answer' in an unsuccessful yet amusing way. For example when one girl was stuck with the addition 17+4, her partner said 'I'm not going to give you the answer, but I'll help you. What is the number before 22?' The girl replied '21' and the boy said 'That's your answer' (Macbeth Primary, P1, Day 4). Therefore, even if the teacher's argument that peer-teaching is a good challenge for the more able pupils was true, in most cases, pupils as young as in the examples above are not mature enough to be able to answer their peers' queries effectively. However, as Blatchford et al. (2003) argued, if teachers prepare pupils to work in groups by clarifying in advance their roles, the tasks they will be assigned and their goals, if they scaffold the tasks pupils are expected to work on and behave as 'a guide on the side, not a sage on the stage', group work and peer-teaching can equally advance all pupils' learning.

Noteworthy is also that, as St Giovanni's RC's former gifted and talented coordinator argued, (some) gifted and talented pupils dislike being asked to teach their peers:

> *'In the past, if someone was really good at something, you'd say go and help someone who is not. Which CAN help them because they have to explain it and be aware of the process they follow, but we did a survey asking among other our gifted and talented pupils what they liked doing and what they didn't like doing. The things they didn't like doing were things like being told to colour in or go and help someone else. They felt as though they were doing the teacher's job, they thought, well actually I want to be challenged'. (School 4, Interview with Year 2 teacher).*

The above statement is in line with relevant findings from the literature (e.g. Adams-Byers, Squiller Whitsell & Moon, 2004). However, despite being aware of the results of this school's survey, I observed that most teachers in this school had embedded the strategy of peer-teaching in their day-to-day practice. Furthermore, as literature has indicated, the few benefits gifted and talented pupils may reap from teaching their peers are insignificant compared to the positive outcomes tasks tailored to their needs would bring (Fiedler et al., 1993; Kent Stanley & Baines, 2002).

Therefore, teachers should primarily make sure that gifted pupils are appropriately challenged with tasks tailored to their needs and secondarily encourage them to peer-teach.

10.3 Secondary Responses

In the following paragraphs I will briefly refer to the secondary responses teachers gave me regarding provision for gifted and talented pupils, which relate to 'acceleration', 'specialist provision' and 'one-to-one time'.

Acceleration, although one of the most popular ways to cater for gifted and talented pupils in the relevant literature (e.g. Reis & Renzulli, 2010), was not so popular amongst my participants. Where however teachers set for maths, curricula were accelerated for the most able pupils and thus pupils were introduced to concepts that they would have otherwise have been introduced to the following academic year. What is more, surprisingly, Da Vinci's School, which was usually reluctant to acknowledge high ability, allowed selected pupils to skip a grade when they felt they were too advanced compared to their same age peers. For example, when one particularly able girl joined the school, it was decided that she should be allocated to the next year class. As her teacher explained:

> *'What we did, it was always clear that she wouldn't she… You know, when she came to the school, if she went to the class below, she would have been really far too far ahead, and she would have been bored I think. So she needed that little bit of extra… And even though she is younger, she is VERY able. […] She's actually…, because I've got a few who are slightly old for the class, she is actually 18 months younger than the oldest.' (School 5, Interview with Y7 teacher).*

Specialist provision was considered by some teachers as a useful strategy to cater for some of the gifted and talented pupils' unusual abilities that they would not normally be able to accommodate. It was argued for example, that a music or dance teacher should be employed by the school to identify and promote talent in these areas, especially where children were not offered such opportunities at home. Moreover, as it has been already mentioned, St Achillas's RC's head teacher believed that in order to challenge his most able pupils in numeracy, a specialist secondary school teacher

should be hired, because the other teachers would not have 'the expertise' to challenge them enough. Finally, in the same school, they offered the opportunity to senior gifted pupils in areas such as science or history to attend a few 'specialist' classes at the local comprehensive (secondary) school. As was reported to me:

> *'So if you are identifying children who are going to do really well in these topics we take them to the comprehensive school, secondary school and let them do some extra lessons in there with secondary school teachers. So that's like a next level up.' (School 3, Interview with deputy head teacher).*

One-to-one time, as most teachers argued is a very effective way to support those pupils who struggle. Nevertheless, some teachers from Schools 3 and 4 suggested that all pupils, including the most able ones, should have the opportunity to spend some one-to-one time with a teacher or teaching assistant from time to time. This gives the teacher the opportunity to identify each child's strengths, weaknesses and interests. As one teacher argued:

> *'I found that reading interventions seem to be aimed at children who were overlooked as readers or who didn't have reading support at home, or who were poor? But in my opinion every child should be listened to. Because just because you have a mum at home who has time to sit and listen it doesn't mean that you don't get listened to at school. So when I came up here, I became the English coordinator so I changed for the whole school that every child had to be listened to by an adult at least once a week regardless of what the level is… So now every child is listened to every week at least once. The less able are listened to at least three times by an adult.' (School 3, Interview with Y5 teacher).*

It is obvious from the above that the norm still is to focus on those who struggle, but at least more able pupil's right to one-to-one time with the teacher is acknowledged.

10.4 Resources

The question of the degree to which a school chooses or is able to provide for the needs of their gifted and talented pupils can be partly answered by looking at how their resources are distributed. Therefore to conclude this chapter I will discuss how these resources were allocated to different groups of pupils in order to determine where

the schools' priorities lay. For example, as it has been mentioned already, in all schools, Pupil Support Teachers were asked to focus exclusively or mainly at the lowest end of the class and usually on pupils with SEN. It was frequently mentioned by teachers that employing PSAs enables them to focus on the middle and high end of the class. When asked why PSAs focused exclusively on the bottom end of the class (when actually there were overall very few cases of pupils with SEN in the school), a teacher from Da Vinci's School argued that:

> *'I think it's the idea that the teacher can accommodate the more able ones one way or another, and obviously the less able pupils are in need of additional support. And it really works when the teacher is of the ability to teach the more able pupils. If you are struggling to keep up with them, which does happen, then it can be a disadvantage.' (School 5, Interview with Y3 teacher).*

In some cases however, especially in English schools, teachers argued that Support Teachers should not focus exclusively on the needs of the less able pupils but occasionally worked with the most able ones too. In St Achillas's RC, where plenty of PSAs were employed, it was observed that they mainly worked with pupils with SEN. However, as the deputy head teacher argued, the school employed a specialist secondary teacher to challenge the most able learners in maths, thus making sure that there is a fair allocation of resources between the two ability groups. Apart from that, they made sure that PSAs worked for at least 10 minutes per week with all pupils on a one-to-one basis, reading mainly books aloud.

What is more, in St Giovanni's RC, one of the support teachers employed, was responsible to help the Year 6 teacher with the preparation for SATs. Hence the two teachers often split the class in two groups and the support teacher worked with one half on a separate room doing IT or preparing the subject that the teacher would later on further enhance. This, as the teacher argued was more than just having the support teacher focus only on the less able pupils and allowed her to work more effectively with small groups. Nevertheless, as the school's former Gifted and Talented Coordinator informed me,

> *'when provision for these pupils used to be more fashionable, […] this teaching assistant was employed to do problem solving activities, puzzles and critical thinking sessions for the gifted and talented pupils. Now she helps with the preparation for the SATs'. (School 4, Interview with Y2 teacher).*

Quite Interesting is also the case of Macbeth Primary, which had quite limited financial resources and was unable to employ enough PSAs to support teachers. However, as it has been previously mentioned the school was provided with pupil iPads from the Local Authority. The school management had recently decided to introduce a course on Spanish by employing a Spanish teaching assistant for only a couple of hours per week and mainly take into advantage the use of the application 'Duolingo', which enables pupils to repeat the vocabulary they did in class and then helps them put it in phrases. In addition, this application allowed pupils to work independently and learn at their own pace. Thus less able pupils were able to 'play' at the easiest level until they felt more confident to move on and most able pupils chose the hard level and were challenged accordingly. However, this was one of the few opportunities given to gifted and talented learners and it is quite surprising that teachers did not appreciate the fact that iPads could enable them to challenge their most able pupils in a similar way in other subjects too.

Overall, however, it was quite clear that in English schools, teachers felt that they should provide equal opportunities to all pupils and therefore tried to find a balance in the distribution of (support) staff and other resources. On the other hand, Scottish schools and Da Vinci's School often claimed that since less able pupils are in a more 'vulnerable position' they should be given more support than their more able peers and acted accordingly. The latter reflects the still prevalent belief that provision for gifted pupils is 'a further privilege for the already privileged' and that no additional advantages should be offered to those 'who are supposedly already advantaged' (Collins, 2001, p.2)

Having analysed teachers' approach to the provision for gifted and talented pupils in this and the previous chapter, I will proceed with a discussion of the (key) role grouping arrangements played in most of the schools studied.

Chapter 11 Grouping Arrangements

Having discussed my major findings relating to teachers' beliefs and attitudes towards provision for the gifted and talented learners, I will now focus on their beliefs about grouping arrangements. To be specific, one of the unexpected and very central themes that emerged from this piece of research was 'ability groupings'. The descriptor 'ability grouping' is used here 'in recognition of its currency in schools, although groupings being considered might more accurately be described as 'attainment or 'achievement' groupings' (Davies et al., 2003, p.45).

Although I had not originally planned to ask teachers any questions about their seating arrangements, it almost invariably came up both in my discussions with them and during classroom observations. Most teachers who argued that they cater for the needs of their gifted and talented pupils when asked to specify the ways they did that, they mainly referred to the ways they assessed them in order to group them by ability. It was implied that by grouping or setting pupils by ability they provided for their needs. Despite that, when asked to explain the reasoning behind their grouping arrangements, teachers did not usually refer to any possible advantages to gifted and talented pupils. Indeed pupils in most classes observed, with the exception of Da Vinci's School, were grouped by ability in at least two curricular areas. Unsurprisingly, teachers reflected on their pupils in terms of 'levels' of achievement rather than their (potential) ability; they talked about their 'top group' pupils instead of their 'gifted' or 'more able' pupils. Moreover, when they were asked to explain why they grouped pupils by ability, what the purpose of this procedure was and where it originated from, their answers concentrated on how they decided whom to allocate to each group.

Numeracy and literacy were the two curricular areas where teachers either set or ability-grouped pupils within class. The other topics were generally taught through mixed ability groups. In both set and ability grouped classes the dominant teaching approach was direct, whole-class instruction, which was followed by the assignment

of tasks that pupils should complete (independently). Pupils in set classes spent at least one third of their time in assessments (e.g. mental arithmetic tests, memory and quick revision tests), while non-set classes spent considerably less time being assessed (see Chapter 7). The number of ability groups and sets varied from class to class. Usually there were at least 4 ability groups within-class, consisting of 4-6 pupils each, and at least three varied-sized sets per year. In St Hermylus's RC, setting was introduced following the appointment of a new head teacher and the identification of numeracy as an area of weakness, while in St Achillas's RC it resulted from an Ofsted report which pointed out that provision for gifted and talented learners, especially in numeracy, was poor. In both cases setting was introduced as an experiment to be tried in one curricular area and one year group, with plans to gradually expand it to other subject areas and year groups. Neither of the schools which employed setting had developed or documented a clear and coherent policy with a rationale for using this strategy and the specific steps teachers take to allocate pupils to sets and monitor their progress. Parents should therefore contact the head teacher or teacher directly to find out why and how setting operated in the school. This lack of documentation also meant that it was hard to 'keep track of changes to principles and practices over time, and to ensure that all teachers were operating the same way' (McPake, Harlen, Powney & Davidson, 1999b, p.21). Indeed, as I will further explain below, it was not clear how pupils were allocated to sets/ability groups, whether they could move to another set/group and how their progress was monitored.

In the following paragraphs I will endeavour to discuss the reasoning underpinning teachers' decisions to group their pupils by ability, set them or keep them in mixed groups, the formal or informal allocation approaches they adopted, the ways they monitored their progress and the degree of flexibility to move between groups or sets that was empowered, and finally pupils' awareness of these procedures.

11.1 Reasoning

In all schools observed regardless of the grouping arrangement chosen, teachers' main argument for its use was their conviction of its efficacy in raising attainment. It was repeatedly argued that other forms of grouping had been tried in the

past but they were not deemed as effective. Such an example is a head teacher's argument below:

> *'We used to group them by ability [within the class], but the results continuously showed that they underachieved. So we decided to set them…Now everyone is doing much better and they know that it is for their best, to tailor teaching to their needs'. (St Achillas's RC, Interview with head teacher)*

Nevertheless, as Hallam and Parsons (2014) pointed out, 'there is no consistent evidence from the UK or internationally that structured ability grouping raises attainment' (p.409). In fact, as Schofield's (2010) review of the relevant literature concluded, attainment may reduce for the lower 'ability' groups or sets. The latter, might explain why teachers at the end of Year 5 in St Achillas's RC, despite their earlier assertions that setting improves all pupils' attainment, observed that the gap between higher and lower sets in numeracy had widened and consequently decided to make an intervention to close this gap. On the other hand, within- class groupings, consisting of small and flexible groups with carefully selected tasks to promote 'optimal group functioning may offer a more effective learning environment' (Hallam & Parsons, 2014, p.409).

In Da Vinci's School where pupils were not grouped in any way but were seated in single desks forming columns, when asked about it, teachers tended to respond by explaining why grouping them by ability was inappropriate and not by accounting for the ways a mixed setting would benefit them. They argued that they were strongly opposed to 'homogeneous grouping procedures' because they are highly segregating, they do not enhance children's learning and undermine their motivation. They did not however explain why they did not arrange them in mixed ability groups either, but in single desks, where everyone was detached from their peers and cooperative learning was excluded. One teacher in particular reported in detail the reasons why she does not favour ability grouping of any sort:

> *'We try not to, when they are younger, we try to keep them together, we try to ...I mean our philosophy is, that every child has a different strength, everyone is different. And so we try to get them not to compete with each other, so they can feel good about… you know, if they are not a brilliant mathematician,*

> *they're ok, but they're really good at art, they're good at writing or something else that they can feel good about.' (School 5, Interview with Y3 teacher)*

Although similar concerns about the social segregating character of ability grouping and its tendency to reduce pupils' motivation have been raised by several researchers (e.g. Hallam & Parsons, 2014; Smith & Sutherland, 2003), it is also important that a 'brilliant mathematician' or 'writer' is appreciated and offered the right opportunities to nurture his or her talents (Patrick et al., 2005). Instead, as was mentioned in the previous chapters, pupils in this school were asked to work on the same tasks, whole-class teaching was favoured and teachers' expectations tended to be rather low, which is in line with what Ireson and Hallam (1999) observed about mixed ability teaching (See Chapter 3).

In the other four cases, where some form of ability grouping existed, teachers used various arguments to account for their choices. Some claimed that grouping pupils within the class enabled them to support the less able and extend the more able, by making them constantly aware of their class's different needs and allowing them to plan their lessons accordingly:

> *'Eh, I think it certainly helps the lower end because sometimes you get children that actually can't do something and they need to have it done again. Eh in terms of the top end, it is a good way to push them as well. So what I try to do is, I plan the general piece of work that fits with the curriculum for Year 3, and then I look at what we've done so far and then I see which people can do that already and maybe do something else and then see which people aren't quite there and do it that way. So I do think it's quite helpful… It's just to help me with me planning really… From my point of view and Mrs Heyward's [the previous Coordinator], when I was deciding what I want to do with the class, I couldn't do it any other way. I need to know who the more able ones are, otherwise I cannot help them.' (St Giovanni's RC, Interview with Y3 teacher).*

This argument is in absolute agreement with Slavin's (1990) statement that those who favour ability grouping argue that it facilitates the adaptation of instruction and materials to both the lower and higher ability children. Indeed, as Slavin (1990) concluded, within-class ability groupings can be more effective than setting for all students, provided that the teacher differentiates effectively, encourages cooperative

learning and occasionally offers acceleration opportunities for the 'extremely able' learners.

In St Hermylus's on the other hand, where pupils were seated in ability groups but all pupils worked in the same tasks throughout the lesson, teachers argued that this was mainly a way to manage their class more effectively.

> *'It's all about meeting the child's needs and realistically, I could have 24 groups, it's just a way to manage them.' (School 1, Interview with P1 teacher)*

However, as it was mentioned on Chapter 3 when ability grouping is used to simply enable teachers to manage a class more effectively and minimise disruption, without being supplemented with any kind of differentiation, it does not promote learning (Kulik & Kulik, 1992; Shukhnandan & Lee, 1998).

With setting, especially for numeracy, several similar arguments were used. It was maintained that by the time pupils reach upper school there is a huge difference in their attainment and where support staff is scarce, teachers cannot meet their class's needs effectively. This has been reported in the relevant literature, but it is not clear whether these differences increase as a result of ability groupings or not (McPake et al., 1999b). To tackle these differences, participants in this study argued that setting allows them to spend more time teaching the whole class directly and differentiate tasks accordingly. A P7 teacher for example stated that

> *'Within the classroom, if you don't set it could be teaching across two-three different levels. You could have maybe four groups and you could be teaching totally different concepts. So, to one group you might be teaching addition or another group might be working on fractions, another on percentages and decimals. So you're trying to split yourself in four and the quality of the teaching then goes down, the support you are able to give goes down. I really feel that this year for numeracy compared to last year I'm progressing a lot more (with) the children and that they are getting a more solid foundation on their learning.' (St Hermylus's RC, Interview with P7 teacher).*

Interestingly enough, in St Giovanni's RC where pupils were grouped by ability but not set, when asked about, it a teacher declared that their school had

excellent results in performance tests and that they did not need to take any more 'radical steps' to raise their pupils' attainment, which further supports the argument that if teachers differentiate instruction and materials within mixed-ability classes (as was the case in this school), all pupils' needs can be met.

Finally, almost all participants, when asked about the reasons why they grouped pupils by ability, were rather defensive and affirmed that they made sure that their pupils had as many opportunities as possible to mix, although they were not explicitly asked about it. Most teachers argued amongst others that by regularly mixing pupils they made sure that more able pupils helped their less able peers. This, as a teacher from School 4 explained, benefits both extremes. Specifically:

> *'What we do is, each term I've given the children a different learning partner and it might be... At the start we did maths, so the more able children were paired with the less able person for maths. So they could do some work together, they could explain how things are done, it's just another bit of reinforcement really, just to help each other to try and understand. I've done the same thing with reading and the same thing with writing as well. So I've paired the more able with the less able to get them a bit more support. It's been fairly successful, because I think it just gives the children... with them being in groups they work with the same people quite often, and it's nice to give them a chance to work with somebody else.' (St Giovanni's, Interview with Y3 teacher).*

Notwithstanding the arguments about the effects of peer-tutoring which could be raised by this statement (see Chapter 10), it is important to appreciate this teacher's (instinctive) forethought to regularly provide his pupils with the opportunity to mix and interact with as many peers as possible, preventing the establishment of friendships which are based only on ability and thus creating a more inclusive classroom environment.

11.2 Allocation procedures

Where schools grouped pupils by ability within class and especially where setting was implemented, testing was one of the most common identification techniques.

> *'So when we started off here, we would test them initially just with the SEAL screener for numeracy, because that's what we're using and then with literacy we test them on common words and that sort of thing and we are taking a rough kind of guide there to split them into groups, at the beginning of the term. And then we tested them again just before Christmas so that they are in new groups to start in January…' (Macbeth Primary, Interview with P1 teacher).*

As has been already mentioned in Chapter 7, most schools relied on Key Stage test results, past SATs or QCAs, while other schools had developed their own tests to assess the pupils' levels. This reliance on test is most commonly attributed to teachers' belief that they provide an accurate and objective measurement of pupils' abilities (McPake et al., 1999b).

Nevertheless, tests were not the sole indicator of where pupils should be allocated. All four schools in this study which grouped pupils by ability either in sets or within class reported using additional information to base their decisions on, such as teachers' observations or information from their previous teachers, assessments of their books and the ways they work with their peers and occasionally feedback from the children or their parents. Most participants attributed their commitment to use a variety of sources of information to the fact that tests can often misidentify pupils. Illustrative of this is a P1 teacher's statement:

> *'Originally when the P1s come in, they do a baseline test to assess their numeracy and literacy levels so I get an idea based on that, but to be honest that didn't show me a very accurate reading so it's more just observation, tracking, monitoring them myself and by 4-5 weeks in I have my 4 [pupils] that are significantly higher than the others so it's just from my own observations and my own tracking that I'll be able to identify the pupils.' (St Hermylus's RC, Interview with P1 teacher)*

Indeed, as it was discussed on Chapter 7 'generic' tests, are not always reliable, especially when identifying pupils from ethnic minorities, disadvantaged backgrounds or the 'twice-exceptional' (Boaler, William & Brown, 2000).

Even the schools with very structured groupings admitted that tests could not always give an accurate estimation of pupils' levels. As the teacher responsible for the most able set in maths in School 3 argued,

> *'Certainly for the maths group, pupils are set based on their test scores, of their assessed levels…So it's just.., we're using past SAT papers and what we've been doing in class to assess what level they are at, because it doesn't always match up to what they can do in a test or vice versa. Some of them go in pieces in tests and, but you know they can do it because they do it every day in class.' (St Achillas's, Interview with maths teacher)*

Most significantly, concerns about the credibility of tests were raised in cases where a large amount of the class population was ethnic minorities. In this case it was acknowledged by teachers that those pupils often underachieved in tests as a result of their poor communication skills:

> *'…especially in my particular class I've got so many Polish children, their language is a barrier, so it's hard to assess and the last thing I want to do is group them based on their language ability, when it should be based on their cognitive ability, so perhaps as they start to develop more language they will be able to express how much they know, so it could change' (St Hermylus's RC, Interview with P1 teacher).*

Nevertheless, where groupings were mainly based on teachers' observations, concerns about their reliability were raised too. Illuminating is a teacher's argument that her colleagues usually overestimate their pupils' attainment levels:

> *'…unless people are making accurate observations, by the time they get to me they can appear to be a lot further on than they actually are, and that's the difficulty I face with the levels and I think that's not right, that's not right. So I've actually got to work twice as hard across the year to get the children up to where they said they are at the beginning of the year and beyond; it's really hard being a Y6 teacher. Because you are judged upon that.' (St Giovanni's RC, Interview with Y6 teacher)*

Indeed, as Hallam and Parsons (2014) highlighted, teachers can often be unconsciously biased, identifying boys, children from disadvantaged backgrounds and those who misbehave as pupils with additional support needs. Thankfully, however, teachers in this school opted for more flexible groupings and the possible effects of wrong evaluations could more easily be mitigated.

Unsurprisingly, schools which introduced setting at an early stage (P1/P2) had developed a rather formal policy to assess pupils' so called levels in which the school's management and/or support staff was also involved.

> *'We've got our own tracking system to make sure that our assessments are accurate. We've got the SATs results, the classroom assessments, teachers' observations, the assessment of their books, we've got the information from previous teachers and then we sit together. Me, Alice and Carol and the head and we have a look at this data and decide who goes where… And then of course after they are set, we constantly assess them to make sure our decisions were right.' (St Achillas's, Interview with Y5 teacher).*

Schools which chose more flexible grouping arrangements followed more informal identification procedures and their schools had not always developed detailed policy on how pupils should be grouped. Thus decisions were mainly based on teachers' opinions. For example a newly-employed teacher from Macbeth Primary explained the ways she groups her pupils as follows:

> *'Well, because I'm rather new, I have kept the groupings that existed before I was here, at the beginning of the term. So, I haven't changed them. As for the criteria that you are talking about, I don't know, I might group them in three groups, I don't know, say the first would be a group of pupils who I'd say are at the same level approximately. […]Those who are a bit behind what we are working on, I'd put them in the group of pupils who need more support, in the medium group I'd include those who are doing quite well but may, for example, take them too long to solve an exercise or can't work independently very effectively, or something like that. And for the third group I'd choose those who are very..., how shall I put it, those who whatever we may do, they don't need any support, they are focused and complete their work very fast.' (Macbeth Primary, Interview with P3 teacher)*

There are various points of interest in the above statement, one of which perhaps is that the teacher has taken for granted that grouping her pupils by ability is the only way to teach them and that she has not contemplated the criteria and the suitable processes to allocate them to groups or the methods of instruction that best suit her seating arrangements. Moreover, it appears, based on other similar remarks she made during her chats with me, that the school leadership did not make sure that

there was enough support in place to reinforce a new teacher and acquaint her with the school's formal or informal policies.

Overall, despite the differences in the processes followed by each school or class, the great majority of teachers stated that they had great faith on the effectiveness of their grouping procedures. Indicative of this is the following statement:

> *'It works, it really does. But you know, we've been doing this for quite a long time, and each year, end of term, we get together and re-evaluate it. So, we make sure that what we're doing works best for our pupils. And you know, our school does really well in tests too.' (St Giovanni's, Interview with head teacher).*

11.3 Monitoring and movement of pupils

The importance of monitoring pupils' performance was highlighted by all participants in Schools 1 to 4, where within-class grouping or setting was implemented. As a Y2 teacher stated,

> *'We track very, very carefully and you are accountable for that. This comes to your performance management targets.' (St Giovanni's, Interview with Y2 teacher).*

In Da Vinci's School however, where pupils were mixed, none of the participants considered the diligent monitoring of pupils' performance necessary. Instead, they argued that being responsible for the same class for 8 years enabled them to have a high awareness of their pupils' skills and weaknesses and thus tailor their teaching accordingly.

The reported monitoring techniques of the other schools varied a lot. Usually teachers acquired an initial formal or informal evaluation of pupils' levels of attainments from the previous class teacher. Then they observed them in class and/or assessed them during the first weeks of term. Combining the information they had thus far, most teachers would next group their pupils. Then, monitoring their pupils' progress with written assessments and observations was argued to be an ongoing process by most participants. At the end of each term teachers would assess their progress and where necessary move their pupils to another group. However, where setting was implemented, pupils were set at the beginning of term based on the overall

assessments of the previous term. Despite that, teachers argued that they still monitored their progress continuously. Indeed, as McPake et al. (1999b) underlined, 'given the explicit focus [of these groupings] on the raising of attainment, regular assessment would help to evaluate the effectiveness of the approach' (p.19) and enable teachers to review placements.

In Macbeth Primary teachers were mainly responsible to carry out the monitoring procedures. At the end of term they discussed their assessments and any concerns they had in a group consisting of: a support for learning teacher, themselves and a colleague responsible for the same year group. Monitoring procedures in Schools 1, 3 and 4 were overseen by the head teacher towards the end of terms. This was argued to enable them to review the school's grouping policy as a whole and introduce interventions if necessary. Standardised tests were one of teachers' tools in the monitoring process. As a teacher from School 4 argued,

> *'We've got a set pack. So we use these every year, they are all SATs papers basically. […] It's just, a way to see where they came in and where they are now. So we give them the standard tests and that gives an indication of where they are and how they moved from the start of the year.' (St Giovanni's, Interview with Y3 teacher)*

The monitoring process was not only used to review the school or class's grouping decisions (see Chapter 7), but also to enable teachers to move pupils to different groups or sets in case they had been misplaced and shape their instruction accordingly. Most participants stretched the importance of moving pupils when required. A P1 teacher, for example, stated that:

> *'Another thing that you have to be careful with in your groupings is not to keep them stuck in that group for the next 7 years of their primary education and making aware that actually there should be a lot of movement back and forward.' (St Hermylus's, Interview with P1 teacher).*

Nevertheless, teachers' responses as to the extent of movement was a little vague. Despite being asked about the amounts of pupils moving up or down, only a couple of teachers responded to the question.

> *'Yes, they do move. In year 5 we've had two who came out of the middle ability set and moved to the higher set. So, it's, there's nothing set, once they are in that group, parents do know that there is still movement within the groups. It's not set in stone.' (St Achillas's RC, Interview with maths teacher).*

It seems therefore, that McPake et al.'s (1999b) conclusion that movement between groups and settings in particular occurs relatively rarely, is justified, despite teachers' assertions of the opposite.

Nevertheless, where pupils were grouped within their class, movement was smoother, more frequent and less formal. Some teachers in St Giovanni's RC, for example, informed me that even though they grouped their pupils by ability in numeracy and literacy they had specific pupils move between the groups depending on the task.

> *'In terms of the ability groups in the class, I do have set ability groups based on the levels they came up with, but it's very flexible. For example I've got a boy on that table here (pointing at lower ability group), his addition and subtraction isn't fantastic but he could do his fractions work, so when we came to the problem solving for the fractions he was in the top group for that, because he did not need any more practice with it. So I try and keep it flexible, as much as possible.' (School 4, Interview with Y2 teacher).*

However, where pupils were set, movement was not as straightforward. Despite the fact that teachers were overall confident about the allocation process and argued that whenever a pupil seemed to struggle or do much better than expected, they would be moved to the most suitable set, I often observed that teachers would postpone such movements to the end of term. For example, when I asked a teacher from St Hermylus's RC about a pupil who seemed to struggle more than his peers in numeracy, she told me:

> *'Yes, you are right. But you see, it will be rather bad for his confidence to move him down just a couple of months before the end of term. Next term we will reshuffle them.' (St Hermylus's RC, Informal chat with P7 teacher).*

Another factor with an impact on the degree to which movement among groups or sets was employed had to do with the available space in tables or classes. To be

specific, since group tables usually had space for 4 or 6 pupils, a seventh pupil would have to be allocated to another group. When asked about a pupil who was very confident with his additions and subtractions but was seated on a middle ability group, a teacher informed me that it would be tricky to move him up as that would mean moving down another pupil:

> *'Well, he should probably move to the higher group, as the test results show us. But probably it's hard to say to another kid that now you have to move to the lower table, seeing as it's the end of the year. Maybe we'll change the groups next year.' (St Giovanni's RC, Informal chat, Y2 teacher).*

Similar findings have been reported in several studies of ability grouping and setting, which have concluded that flexibility is fairly limited, both because of space restrictions and teachers' reluctance to move pupils downwards (Hallam & Parsons, 2014; McPake et al., 1999b).

Noteworthy is that although most teachers reported their confidence in the effectiveness of the selection of pupils by ability and did not mention any serious concerns about it, when prompted to discuss about the movement of pupils between groups, they almost uniformly referred to limitations of this strategy. The most serious concern cited was relevant to the feelings pupils might have about the allocation or movement to a specific group. Where pupils were set such concerns were more frequently voiced. Teachers hesitated to move pupils to a lower group or set for fear of afflicting their self-esteem. In order to minimise the possibility of a pupil needing to move to a lower set, many teachers argued that they would rather allocate them to the lower group originally and if necessary move them up later.

> *'To be honest, you'd rather for a child be in a lower group and move them up and put them in a higher group than move them down, because that's really bad for their confidence. After that, we eh see, it's kind of trial and error, we see how they get on; do we feel that they are at the right group? So we try our best. If you are borderline, you will put them in a lower group and if they feel they are coping, if they understand, they can then move on.' (St Hermylus's, Interview with P7 teacher)*

A few teachers however argued that when pupils struggle with the work assigned to them, then they should be moved to a lower group where they will be successful again and that will boost their confidence.

> *'Well Maurice isn't coping with the level of work that's being asked of him now, so I think, well, […] getting him to sit with the middle group might help him find his success again, because he is actually not finding the motivation to succeed, because he is taking a lot longer. His writing skills are not up to scratch, so the other children are writing far more than he is, he feels a wee bit left behind. So he does need that extra time and we cater for that, we understand that, but if his word level work isn't there, if he's not actually grasping the concepts because he is too worried about his writing, […] he might find more success in the other group.' (Macbeth Primary, Interview with P2 teacher)*

Another difficulty teachers seemed to encounter when moving pupils to lower groups/sets was pupils and parents' reactions. It was argued that in such cases, they would bring the issue as delicately as possible to the pupils in question and depending on their reactions they would proceed accordingly. A teacher for example told me that:

> *'I would discuss this with the child and if they did come up and say 'oh, I don't want to work here', I'd explain that 'this will benefit you, but maybe we will re-evaluate it in a month's time or a couple of weeks' time, see how you're getting on and if you've progressed, and if you work really hard, then it could lead to a movement up.' (St Hermylus's, Interview with P7 teacher).*

To avoid any reactions from parents almost all teachers admitted that they did not inform them about the ways pupils were grouped within their class. Indicative of this is the following dialogue with one teacher:

> *'She: It should be…, one of the areas to work on was to involve parents more, but to be honest, the more you allow parents to get involved into who is gifted and who's not, it causes trouble. It just causes trouble.*
>
> *Me: What sort of trouble?*
>
> *She: Well, it's just, you know… You can't have two parents of two children in the same classroom and say one child is Gifted and Talented and the other not. Because the other one will say, why is my child not? And it's something that is meant to be*

> *pushed, that's a quality mark that's meant to be strong parental involvement. But I never found a way to that, I didn't see what we could gain from it. The academic side, we, we can do ourselves, we can see. No matter what the parents say about how fabulous their child is in maths, they are not! Teacher can tell that better. So it's better to say as little as possible about these things.' (St Giovanni's RC, Interview with Year 5 teacher).*

Regardless of the point that 'parental involvement' is a quality mark, a fairly reasonable question with regard to statements such as the above is, whether parents have a right to know about key processes employed in their children's schools, such as ability grouping. Moreover, if teachers are very confident that such strategies can only benefit all pupils, as they unanimously stated, why is it so hard to explain it to parents?

With setting though teachers were naturally more explicit; they roughly explained in parents evenings (St Hermylus's RC) or with newsletters (St Achillas's RC), that in order to 'raise attainment for all pupils' and 'tailor instruction to all children's needs', they have decided (or been advised) to introduce setting. In the case of St Achillas's RC, where teachers were more outspoken about the rationale for introducing setting, the ways they allocated pupils to sets and monitored their progress, it was argued that parents were highly supportive of this, and believed that it would benefit their children. A very similar finding was reported by McPake et al. (1999a), where it was found that the school which 'actively sought parent's views' on setting, found that parents were predominately supportive (p.27). It is possible therefore to argue that when parents feel that the school is not completely honest with them, they grow suspicious.

When parents complained that their children did not have the opportunity to spend time with their friends, teachers argued that the time they spend grouped by ability is limited and that they have many opportunities to mix; when, for example, they work with their learning partners or in mixed ability groups for the rest of the topics, when they join their house buddies etc. In the few reported cases that parents' complaints were more outspoken and related to the accuracy of the allocation, teachers

tried to persuade them against it but sometimes they might adapt to their requests. For example as a teacher implementing setting for numeracy stated,

> *'We try to explain that we are trying to put them in a group that they will have a sense of achievement with their numeracy. If the parents have a real problem with it and a real issue and would like to move them up, we, we will accommodate that. But we also explain that maybe that's not the best for their development.' (St Hermylus's RC, Interview with P7 teacher).*

11.4 Pupils' awareness

Another issue relevant to the discussion about the various grouping practices is the degree to which pupils are (made) aware of their teachers' decisions and how they feel about it. Although pupils were not interviewed in this study, many opportunities arose where pupils expressed their thoughts on that matter.

Most teachers who implemented within class grouping argued that the fact that pupils were grouped in terms of ability should not be disclosed to them. None of the groups observed was labelled using terms relevant to ability; colours, shapes and animals were the most common names used for groups (see Chapter 7). As a teacher emphatically argued

> *'We would never label them, we would never call them the highly able group. We would never say that.' (St Achillas's RC, Interview with Y5 teacher)*

It could however be counter-argued that teachers were not as discreet with labels as they intended to be. Very often I observed that the tasks assigned to pupils related to numerical labels; in literacy for example, pupils used a personal target sheet which was labelled as 'Curriculum for Excellence First Level 1-3' or 'First Level 4-6' etc. As one teacher admitted

> *'They can recognise a textbook, if it's not the level it should be. So children who are in Primary 7 and are still working Primary 3 level, they can see the THREE on the textbook and that's really difficult… But it's hard to find an activity that makes the most of them without telling them to give up at that stage'. (St Hermylus's RC, Interview with P2 teacher)*

Nevertheless almost all teachers believed that younger pupils would not be able to realise how they were grouped since they were not explicit about it. As one teacher pointed out,

> *'I mean, they know they are part of a group, the red group or whatever, but I don't think they understand it's to do with ability now. However, I don't know, it could be that they start picking up it's more like like-minded individuals in my group as well (laughing). It might become more apparent to them though.' (St Hermylus's RC, Interview with P1 teacher)*

My observations however indicated the opposite. Even pupils as young as 5 or 6 years old were aware of the fact that they were working at a different level from their peers and that the teachers differentiated in terms of how well they did in each subject. A characteristic example is the following discussion which took place between me and the pupils of a Year 2 most able group:

> *'A girl suddenly declares: 'You know, that's the top table. I used to be at that over there [pointing towards the 4th group], but I've now moved here'. Another girl says: 'I'm at this table for maths only [pointing towards the 3d table]. And a boy from the same table says 'I'm always in this table. We move around, but for the topics we go wherever we like'. (St Giovanni's RC, Day 8, Y2).*

On the other hand, all teachers realised that older pupils were aware of the ways they were grouped. Indeed some teachers declared that they were more explicit with older pupils especially where pupils where set for one or more topics. As a deputy head teacher informed me

> *'I think when it comes to year 6, children are more open about their ability and what they need help with, because they know it's an important year. So you can talk to them in such a way that you say, you know, we are all individuals, we are all different, we are trying to do the best for you, we want you to feel comfortable, eh if you find this a bit harder, perhaps it might be best if you go in this class, because we want you to do your best, if you are not doing your best there, there may be some things that we can help you with. And they are, they are quite good. If you have a conversation with the parent before you allocate the child and explain, it's better. So it is a pretty delicate task.' (St Giovanni's, Interview with deputy head-teacher).*

Similarly, although this school did not set pupils, they were very clear about pupils' 'levels' and the 'targets' they were expected to achieve, and pupils took these classifications for granted. They explained pupils that based on their assessments it was deduced that they worked at a specific level and therefore the aim would be to at least reach the next level up (See Chapter 7). As the deputy head further explained,

> *'We have a massive push in school with the children to understand where they are working at and what their targets are. And the children understand that they're working at their level. And they know they'll be pushed if they're strong in one area and everybody likes that.'*

What is more, as has been argued already, being very explicit about pupils' targets and expectations of them, enables them to take ownership of their learning and become active partners in their education.

In some cases too, pupils' comments indicated that they considered the members of their group/set as their 'intellectual peers'. In many occasions pupils' discussions suggested that they realised that being in the top group means that you don't struggle with the every-day tasks and that you are likely to make fewer mistakes than pupils from the other groups. A girl from the 'lions' (top maths group) commented on the task given to them by the teacher:

> *'That's very easy!![Laughs excitedly] But probably it's easy for US! The others will find it harder.' (St Giovanni's, Day 4, Y2)*

Apart from being aware of the fact that they were grouped in terms of ability, pupils were also aware of the criteria teachers used to base their decisions on. This was more evident where pupils were set and/or the school was more open about their grouping procedures. During one of my observations of the top set in numeracy in St Achillas's RC, the following discussion took place among three pupils regarding one of their mainstream class peers who was about to join their set:

> *'Did Mary do well on the test?' 'It isn't only the test that matters, you know. It is what you do every day', 'That's why I'm here… I never do well on tests.' (St Achillas's RC, Day 4, Y6 top set)*

What is more, some pupils realised that being allocated to a group was not something permanent and that depending on how 'well they worked' they might be moved accordingly. This was particularly emphasised to less able pupils in order to encourage them to try harder every day. Indicative is the following dialogue between a pupil from the rectangles (lower ability group in maths) and another one who was recently moved to the squares (top group):

> *'Wow! You moved up to the squares!!' 'Yes, I was working very hard and Miss Baker told me I got better! (School 2, P2 pupils).*

However, it should also be noted that in several occasions pupils appeared to be disappointed about working at the lowest group or set. One girl for example informed me very proudly that she was at the top group in literacy but then added sadly that she was in the middle group for numeracy, because she wasn't very good with divisions. In another instance a pupil who was recently moved down to the middle ability group in maths asked the teacher:

> *'Will I be challenged here?' And she replied 'Yes, but you must first do some catching up. So, focus on your work.' At that the pupil turned to me and said quite crossly: 'I always have to chop-chop'. (Macbeth Primary, Day 10, P2)*

It is therefore important to underline, yet again, that placements in ability groups or sets, especially the lowest ones, can lower pupils' self-esteem and sense of self-efficacy, reduce their motivation and determine their peer groups (Yonezawa & Jones, 2006). Consequently, teachers must be very cautious when they decide to introduce such practices.

11.5Tasks and attitudes

Finally, another important aspect of setting and ability grouping is the tasks pupils in different ability groups or sets are assigned and the ways teachers treat them. As I did not have the opportunity to observe lower sets, I will focus mainly on my observations of all ability groups and the top sets.

I often observed that pupils working in low ability groups were mostly assigned very simple tasks which required low-level skills and precluded group working. What

is more, although they were assigned much easier tasks compared to their peers, I often observed that a teaching assistant who was sitting with the 'bottom' group, would either dictate the answers before giving them enough time to think about it on their own or even ask them to copy the answers from a small blackboard, used especially with this group. Similar attitudes have been observed by Boaler et al. (2000) in their study of ability grouping and setting in six English schools. In their study, students in the lower sets or groups reported that the work assigned to them was always too easy and menial, not aiming at developing their critical thinking skills. Moreover, as I observed, sometimes teachers were impatient and even discourteous towards their lower ability pupils. For example, when one pupil was stuck with the work assigned to him, the teacher commented irritably:

> *'Ned you only need to copy from the board. It's very easy. There's no need to use your brain.' (St Achillas's, Day 6, Y5).*

Unbelievable as the above comment may appear, it was not very uncommon for such remarks to be made disregarding pupils' feelings. Moreover, few, fortunately, teachers had very low expectations of their lower ability pupils, and when one managed to solve a hard problem, they suspected them of cheating. For example, one day a teacher assigned the same task to every pupil and when one of the 'low ability' boys gave him his solution, the teacher said: 'You can't have solved it! How did you do it? Who helped you?'. Such attitudes and low expectations are likely to make pupils consider themselves as failures and conform to teachers' expectations (Boaler et al., 2000).

In contrast, teachers were more understanding when a more able pupil was stuck, and were happy to help them. They did not suspect them of cheating, although working usually near these pupils, I observed that such instances were not that uncommon. Moreover, the same teacher who was sited a couple of paragraphs above, often praised her more able pupils as 'being always one step ahead of the rest of the class', though to my mind the 'achievement' did not always justify the praise. It could perhaps be speculated that either teachers were too ready to praise more able pupils or they did it to indirectly motivate the rest of the class to follow their example. Even if

these examples are extreme and rare, they do indicate the differences in teachers' attitudes depending on pupils' ability, as I perceived them.

Tasks assigned to classes where ability grouping was implemented, were not in all cases regularly differentiated (see Chapter 7). When they were, they were rarely challenging, and as it has been mentioned before, pupils found them relatively easy and the pace of learning was (perhaps too) relaxed. Tasks assigned to the top sets however, where much more demanding and teachers' expectations were very high. In St Achillas's top sets, lessons were very fast paced, involved a lot of testing, and high pressure. The teacher always used an online timer to increase competition between her pupils and often reminded them of the upcoming exams to encourage them to work harder and faster. Remarks such as 'You are the school's most able young mathematicians, you certainly can do this' or 'If you don't work faster, you are never going to get the results we want' were rather common. However, most pupils seemed relaxed and happy. Indeed, as the deputy head informed me, since setting was implemented, gifted pupils in mathematics felt it was the first time they were challenged. Only one or two pupils who were struggling more than the others were embarrassed when the whole class was waiting for them to understand a certain problem. Finally, lessons were more procedural than in the mixed classes. They started with a mental maths test, followed by another test (usually arithmetic), then the teacher demonstrated rather quickly and without much explanation a new method and the pupils were asked to work again independently on embedding tasks. In St Hermylus's RC though, lessons in the top sets were neither so fast and stressful or procedural. In fact, as it has been mentioned earlier, the teacher further differentiated her set in three smaller groups and spent some time instructing or giving feedback to each group. Exams were never mentioned as a threat and pupils were encouraged to work at their own pace. If anyone was stuck, the teacher made sure that she spent as long as it was needed to clarify things.

To conclude, it is obvious from the above, that no class, mixed or set, was exactly the same as the others and when commenting on a specific strategy's strengths and weaknesses, it is important to consider the individual circumstances and people involved. Nevertheless, a few conclusions may be drawn. First, as it has been already

pointed out, relevant research indicates that achievement levels for the middle and lower ability groups are no better where ability grouping has been implemented. What is more, few studies have reported any educationally significant positive effects for high achievers (Davies et al., 2003). Indeed, 'all reviewers of studies comparing ability grouped and non-grouped classes agree that there are no overall positive effects of ability grouping on achievement' (Braddock et al., 1992, p.6). Nevertheless, it is often argued by policy makers, Ofsted Investigators and educators that 'homogeneous' ability grouping is one of the ways to provide for the more able or gifted pupils in the mainstream setting and improve general attainment and 'schools are caught between these two conflicting messages' (Smith & Sutherland, 2003, p.142). Moreover, teachers who implemented setting or within-class ability groupings in this study, reported that they considered the approach adopted very effective in meeting pupils' needs. It is therefore difficult to judge whether either of the approaches is 'universally good or bad for all students' (Boaler, 1997). What should be determined instead is whether the reasoning behind the implementation of any grouping is clear to teachers, parents and pupils, whether a careful and systematic approach to identification is adopted, whether movement between groups is not just 'allowed', but facilitated, whether tasks are challenging enough for all, whether teachers' attitudes regardless of ability or behaviour towards all pupils are positive and whether the effectiveness of either grouping strategy is frequently and open-mindedly evaluated by the whole school community. After all, what should matter most is not the ways pupils are grouped but the learning and teaching processes adopted.

Finally, this chapter focused on the grouping arrangements observed in the case-studied schools, examining the reasoning behind the use of a given arrangement, the allocation movement procedures adopted, pupils' awareness of these groupings and the tasks assigned and attitude of teachers depending on the method chosen. In the next and last chapter of my thesis I will summarise my key findings, draw the final conclusions and examine the possibilities for future research in the area.

Chapter 12 Conclusion

In the last chapter of my thesis, I will chiefly reflect on my main findings. I will also discuss the major limitations of this study, any relevant policy and practice implications and the main contributions of this piece of research.

12.1 Main findings

The main aim of this study as outlined in Chapter 5.2 has been the exploration of the following questions:

1. How do primary practitioners conceptualise gifted and talented pupils and how do they distinguish them from others?

2. How do they consider their role in the identification and provision for these pupils?

3. How do primary practitioners interpret, restructure and apply national or school policy on gifted and talented pupils within these jurisdictions?

4. Whether they face any challenges in applying 'gifted and talented' policies and what steps they take to overcome them?

I will here summarise my main findings based on these four broad questions. However, I should add that the big, and very central concepts of 'identification' and provision' are summarised under one heading, because they are closely interrelated and both of them are continuous processes. In addition to that, I will refer to the ways participants conceptualised giftedness under both the first question and the question concerning 'policy', because they relate to one another, in a sense that policy always makes assumptions about conceptualisation.

1. **Teachers' conceptions of gifted and talented pupils the ways they distinguish them from other pupils.**

One of the ways this aim was approached was by exploring how primary practitioners construe (high) ability and what their beliefs about its nature are, what terms they use, how they define giftedness and what characteristics they attribute to gifted children. I will summarise below the relevant findings as they emerged from the different questions asked.

There was not a single term chosen to describe gifted and talented pupils within my study. Most teachers from my Scottish schools felt rather uncomfortable discussing about (high) ability and were at times evasive. Teachers from my two English schools appeared to feel more comfortable discussing about 'gifted' pupils, but still switched to a 'less controversial' term, such as 'more able' or 'top group', as they became more relaxed in my presence. This is in line with Koshy et al.'s (2012) finding that 62% of teachers in England and Wales feel uncomfortable using the term 'gifted' and describe their pupils as 'more able' instead. As for Da Vinci's School, it would perhaps be plausible to argue that teachers were quite suspicious of high ability. They all rejected the idea of giftedness and argued that all pupils are gifted in a way or another. They mainly refused to speak of any particular 'bright' pupils and whenever the opportunity arose, they highlighted their weaknesses and even made caustic comments about them. These findings indicate that 'high ability' or 'giftedness' is still a controversial issue, even among teachers who acknowledge it in principle. The latter is very significant, because fighting teachers' implicit prejudiced attitudes is a harder task than challenging openly acknowledged concerns and scepticisms (Van den Bergh, Denessen, Hornstra, Voeten & Holland, 2010). What is more, as is the case among scholars and educators who are interested in gifted and talented education (e.g. Matsagouras, 2008), no single term was used amongst teachers to refer to their more able or gifted learners.

Teachers in the two English schools were much more confident and direct than their colleagues in the Scottish schools when describing characteristics of gifted and talented pupils. Even without asking whether gifted are different from the 'more able' pupils, most teachers made this distinction of their own accord. Despite originally acknowledging the existence of a gifted and talented group and declaring they kept a register or record of them, most teachers subsequently argued that they had rarely come

across any gifted pupils and spoke hypothetically about their characteristics and the educational treatment that they require. Thus most participants opted for the term 'more able' which was considered broader, more inclusive and realistic, and expressed the belief that these pupils can 'easily' be accommodated within the mainstream class. By contrast, gifted pupils were mainly pronounced to have 'extreme' abilities and talents, lack social skills and were even occasionally associated with autism by a couple of teachers. This is important because it indicates that the misapprehension that 'gifted pupils' are extremely rare still prevails among teachers. As Brady and Koshy (2014) pointed out, 'gifted' is interpreted as 'exceptional' and thus teachers do not make consistent efforts to cater for them. Teachers in the participating Scottish schools focused chiefly on pupils' academic abilities, while in the English ones acknowledged talents in non-academic areas too. Nevertheless, in both jurisdictions 'talents' were not nurtured as much as 'gifts', which reflects what was reported by the DCSF (2009), i.e. that little support is offered to talented pupils. As Koshy et al. (2012) argued, that too might be associated with the confusion caused by the terms 'gifts' and 'talents' used in relevant policies. Da Vinci's School refused to discuss about gifts in academic areas but valued and promoted talents in the arts and crafts.

Regarding teachers' beliefs about the nature of ability and the ways these beliefs shaped their conceptualisations of giftedness, a rather surprising finding was that most teachers across schools considered the effect of 'nurture' as the main determinant of people's abilities. This view was associated with a popular belief that privileged pupils are inevitably more able and underprivileged pupils less able. Thus they considered that their role is to support the less able in order to tackle inequality and let the privileged 'more able' be supported by their parents. Behind such a stereotypic belief lurks the danger of misidentifying gifted children from underprivileged backgrounds as pupils with ASN or at best 'middle ground' and vice versa. Despite their conviction that nurture or effort is the sole determinant of cognitive abilities, all teachers in Da Vinci's School along with some teachers from the two Scottish schools argued that non-cognitive talents are in fact determined by nature but could not further justify this self-contradictory view. Finally, even teachers who acknowledged that nature or 'genes' are important too, felt ill at ease to elaborate;

some whispered and one even looked behind his back when mentioning that genes determine our abilities to a certain degree. It can be therefore argued that such suspicions or disquietude over 'natural' intelligence certainly have an impact on how teachers treat pupils who display unusual gifts in cognitive areas. Moreover, as Ritchie (2015) emphasised, 'the political and moral […] debate around intelligence distracts from the truly' important question (p.115) of how equality of opportunity can be achieved.

2. Teachers' role in the identification of and provision for gifted and talented pupils.

A very significant finding relating to the question of whether and how teachers identify their gifted and talented learners is that most participants confused identification of gifted and talented pupils with the assessments they carried out to allocate them to ability groups or sets. When asked how they identified their gifted and talented pupils, almost all participants explained how they distributed them to homogeneous groups. Even Da Vinci's teachers, who neither acknowledged giftedness nor grouped pupils in any way, when asked this question, replied that they did not need to identify them because they did not group them by ability. This is particularly interesting because it indicates an almost unanimous misapprehension that identification of pupils' gifts and talents must necessarily lead to within-class ability grouping and/or setting. Most studies investigating ability groupings and giftedness have focused on the impacts these groupings may have on pupils' achievement (e.g. Kulik & Kulik, 1987; Slavin, 1990) or their socioemotional development (e.g. Vogl & Preckel, 2014). However, research exploring teachers' association of gifted education with ability groupings is scarce.

Those teachers who distinguished between the register/record for gifted and talented pupils and their ability grouping procedures, admitted that they saw the 'register' as a formality and that they were confident neither about the rigour nor the effectiveness of the procedure adopted. This suggests that teachers may 'appear' to enact policies in self-assessment/external reports, since they report that they do have a register of their gifted and talented pupils, but this may not really be the case. As it was disclosed, identification of gifted and talented students was mainly left to chance

and relied on teachers' instincts. Similar findings were reported by Smithers and Robinson (2012) who stated that teachers (in England) have been left to themselves. Even G&T Coordinators (Schools 3 and 4) confessed that they were confused about who gifted pupils are and how they can be identified. The significance of this finding is also that even where guidelines for the identification of gifted and talented pupils are available, teachers are still confused or reluctant to follow them. Surprisingly though, up to the point of the question about identification, most participants had professed awareness of and confidence about the issue, which shows how crucial it is to carry out in-depth, open-ended and flexible interviews in order to get a better understanding of the studied phenomena.

From the discussion about identification procedures emerged the category 'assessment' too. An overriding finding was that when discussing about assessment, participants mainly referred to written, formal assessment which was not differentiated. *Assessment of* the school from the Inspectorate (in England) or through national tests played a very significant role in most schools' daily practice; it determined whether setting or ability grouping should be introduced to 'raise attainment', increased competitiveness and limited the amount of time pupils spent in areas other than literacy and numeracy. Moreover, most teachers assumed that good test results indicate satisfactory provision for the gifted and talented pupils, which is very interesting given their other statement that high ability cannot be determined by tests. But most crucially, such assessments were reported and observed to hinder provision for gifted and talented pupils. Brady and Koshy (2014) reported similar findings which indicate that teachers in England prioritise SATs and league tables over the provision for gifted pupils, because they are mainly interested in getting the lowest ability pupils above the threshold of Level 4. *Assessment for* the school was related to the less formal identification of gaps or other weaknesses to be tackled, or the recognition of pupils' levels and the establishment of relevant targets for each of them. Underlying principle in both types of assessment was that schools should make all efforts to ensure that minimum levels of attainment ('floor targets') are reached by all pupils, which questions my participants' professed commitment to equally promote all pupils' learning.

The question of how teachers provided for their gifted and talented/ more able pupils' needs was one of the central questions in this study and was responded to in many ways. In the following paragraphs I will attempt to summarise the main relevant findings. Most of my participants' responses as well as my observations relating to teacher pedagogies to cater for the needs of their gifted and talented pupils were coded as 'challenge', 'differentiation', 'different opportunities', 'peer-teaching' and 'ability grouping' or 'setting'.

Gifted and talented pupils were challenged through 'planned' or 'standard' challenges, during whole class instruction or during group work. All kinds of challenges were mainly offered in numeracy and secondarily in literacy, though rarely in other subjects. Planned challenges were integrated to the daily lesson, were usually presented to a few selected more able pupils and were mainly available in classes where tasks were not differentiated. Standard challenges were always the same and available to whomever completed their tasks ahead of the class, were prepared at the beginning of term usually and consisted of puzzles or problem solving tasks. Pupils were occasionally challenged during whole-class instruction, when a teacher would ask the most able pupils harder questions than the rest of the class. Most common was for the teacher to challenge her more able pupils during group work, while the rest of the class was working on their tasks. Most arguments in favour of offering pupils 'challenges' was that they demanded it, and indeed I often observed pupils asking for more challenging tasks or being really excited when the teacher challenged them during group work. Nevertheless, the majority of the tasks that teachers described as a challenge were actually not very demanding, consisted of consolidation or repetition tasks and were at times assigned in order to keep pupils busy. This lack of appropriate challenge is, according to Reis et al. (2004), one of the main reasons why gifted and talented pupils underachieve. Quite interesting is also the observation that teachers in Scotland (Schools 1 and 2) thought challenging tasks should not introduce pupils to concepts that the rest of the class had not been introduced to, despite the fact that relevant policies do not exclude this option. Yet, as Rogers (2004) argued, accessing advanced content in specific curricula or areas of interest earlier than their peers, can be very beneficial for gifted pupils. In line with this, teachers in England (Schools 3

and 4) believed that truly challenging tasks might occasionally need to be designed 'beyond age expected' thus accelerating pupils, but recent policies advised them against it.

Differentiation was one of the most common responses teachers gave when asked about the ways they provided for their gifted and talented pupils. Some teachers, mainly in English schools, differentiated the tasks assigned to their pupils on a regular basis. School 4 in particular, asked pupils to give feedback on the tasks, in order to ensure that assignments were always suitably challenging. Other teachers (School 1) differentiated instruction, by spending a few minutes per lesson teaching each group different concepts. Moreover, most teachers declared they differentiated 'through setting individual targets' or by expecting different outcomes depending on each pupil's abilities. These types of differentiation were employed mostly where teachers grouped by ability or set and were more common in senior than junior classes. Another interesting strategy (employed only by one teacher) was 'differentiation per choice', where pupils were asked to decide which level of work they felt fit them and sometimes even designed the activities themselves. However, some practices which were described as differentiation, were in fact the opposite. For example School 2 and 5 teachers argued they differentiated 'through the level of support', by which, ironically, they meant that they supported the less able pupils and 'permitted' the more able to work independently (on the same task as everyone). Similarly, other teachers grouped their pupils by ability in order 'to differentiate' but set the same assignments to every group, and the 'top' groups never found them challenging. Finally, homework and assessments were not differentiated, with few exceptions in set classes. To conclude, interviews with teachers had given me the strong impression that differentiation was a very common practice among the schools, my observations however revealed that few teachers did indeed differentiate tasks and instruction regularly and effectively. Surprising though this finding was to me given that 'differentiation' was widely acknowledged as good practice for all pupils' needs, similar observations were made by Reis et al. (2004), who reported that teachers rarely employ this strategy.

'Different opportunities' were offered to all pupils, but teachers recognised and reported their potential to 'challenge' gifted and talented pupils by 'broadening' or

'enriching' them. However, most of these opportunities were rare and not offered in a systematic way. For example, 'pupil voice groups' and watching the CBBC news (School 1 and 2), were two such strategies which had they been employed systematically, they could have promoted pupils' leadership and critical thinking skills as well as their cooperation and negotiating skills. Some teachers also encouraged their pupils to become active 'researchers', by assigning tasks in science or history which pupils had the flexibility to explore in greater depth than usual. Indeed when teachers gave pupils the necessary guidance, encouragement and support, inquiring minds were highly motivated, challenged and gratified by the tasks. Schools 3, 4 and 5 emphasised the importance of giving children various extra-curricular opportunities to nurture their talents (in music, drawing, dancing etc.). When these were offered during the day, they were available to few, selected pupils on the basis of talent, for free. Only Da Vinci's School included these in the day school curriculum, available to all pupils. When they were offered as after-school clubs, they were available to all for a small fee. Finally, in very few cases, cross-curricular activities, such as writing a play, performing and evaluating it were embedded in the lessons, allowing children to use various skills. Overall, the main drawback of offering pupils 'different opportunities' is that, as Brady and Koshy (2014) pointed out, they were seen as an 'add-on' to the curriculum and were not firmly embedded in the mainstream curriculum.

'Peer-teaching' was another strategy widely implemented and claimed to benefit gifted and talented children. In most cases peer-teaching took place between children of the same age but different 'abilities', while in School 1 it also concerned children of different ages regardless of ability. This strategy involved 'tutors' supervising their peers while they worked on a task or during assemblies, assessing one another's work, explaining a difficult concept and answering queries. Most teachers claimed that acting as 'tutors', more able pupils could master what they had already understood, and indeed that might have been the case if used wisely and sparingly (Slavin, 1990). However, this strategy was mainly implemented to support those pupils who were struggling and teachers did not have enough time to help. Consequently, such practices were more common, where there were not any teaching assistants present, thus questioning the argument that it was used to challenge and

teach gifted pupils empathy. What is more, even when teachers were well aware (from previous surveys they had conducted) that gifted pupils disliked being asked to tutor their peers, teachers still employed this strategy. In some extreme cases (School 2 and 5), pupils were used as 'teacher-servants' by being asked to help the teacher manage a disruptive class or to teach their less able peers something that the teacher felt unconfident with, while never being assigned any challenging and meaningful tasks to promote their learning. This is particularly important because it reveals that when the appropriate resources are lacking, teachers do not hesitate to turn to their most able pupils for assistance, disregarding their needs and interests. Only in School 3 were all teachers against this practice, suggesting that in order to teach pupils how to work in harmony with peers of any ability, they should be encouraged to work in mixed ability groups towards a common goal, where each of them would be able to contribute something and all children's input could be appreciated, which is what most relevant research has suggested (e.g.Topping & Ehly, 2001).

The final category which emerged from the question of provision for gifted and talented pupils regards the chosen seating or grouping arrangements made by teachers in the classes observed and is arguably one of the most significant findings of this study. As I have already highlighted, I had not planned to ask questions regarding these arrangements in advance, but discussions about these emerged almost invariably when discussing about a school's approach to the identification or provision of gifted and talented pupils. I therefore soon embedded relevant questions in my interview plan, which I will briefly summarise below.

The main argument used to defend setting or ability grouping was that it raises attainment for all and that it enables teachers to both support the less able and extend the more able pupils. It could therefore be argued that teachers (choose to) ignore relevant research which has repeatedly highlighted that ability grouping fails to raise attainment (Hallam & Parsons, 2014). It was also argued that more homogeneous groupings (within-class or sets) enable teachers to better plan lessons and manage the classroom. Such arguments were even stronger in senior classes, because as teachers explained, the more pupils grow up, differences in their attainment widen. Nevertheless, differentiation according to each group's perceived levels and/or needs

was only observed in Schools 3 and 4. Moreover, despite being seated in groups (both in sets and within-class), pupils were very rarely encouraged to work cooperatively. Teachers in School 5, who unanimously argued against 'homogeneous' groupings, as they considered it highly segregating and elitist, did not explain why learning in single desks is better than mixed ability groups. Finally all teachers, regardless of seating/grouping arrangement chosen, were confident that they were effective in serving all children, although they had not taken any serious steps to assess their grouping decisions.

For the allocation of pupils to groups or sets, tests were mainly used, because they were considered more accurate and objective. These might be past SATs or QCAs, or tests developed by teachers. However, all teachers highlighted the possible dangers of an overreliance on tests, and claimed that they use 'additional information' such as teacher observations, previous in-class assessments and, occasionally, feedback from parents and pupils. Especially with setting, when parents complained of a wrong or unfair allocation, teachers admitted that they reconsidered. Noteworthy is also that, in School 5 where teachers rejected groupings by ability, they actually based their decisions on pupils' aptitude and behaviour. Specifically, 'very bright' pupils were usually seated in the middle of the class to help less able peers, and disruptive children or those who needed additional support were seated near the teacher's desk, at the front of the room.

All schools, with the exception of School 5 considered monitoring pupils' progress as a very important process to ensure that allocations are both accurate and serve pupils' needs. They therefore claimed that it is a constant and ongoing process. Consequently, flexibility in movement between groups and sets was considered very important too. Where within-class ability groupings were implemented, monitoring was rather informal, was based on tests and observations, relied mainly on teachers and any support staff and was occasionally supervised by head teachers. There was some flexibility in the movement of pupils from one group to another when necessary, but since relocation to a lower group was considered harmful to pupils' self-esteem and motivation and it depended on the available space in other groups, teachers were reluctant to move pupils accordingly and postponed it to the end of term or academic

year. In set classes, monitoring was more formal, relied more heavily on tests and was overseen by head-teachers who had the 'final say' in these decisions. All participants argued that there was flexibility in the movement from one set to another, but were vague as to how often that happens. Pupils were assessed throughout the year but, the final assessments and teachers' overall observations were formally reviewed at the end of the academic year when it was determined whether pupils should move to another set.

Most teachers informed me that they were not very explicit about their grouping decisions neither towards parents nor pupils. The main reason for this was their fear that the more parents are involved in these processes the more they may react if they disagree with an allocation. Nevertheless, in School 3, where teachers set throughout the school, parents were better informed about the processes the school followed, and it was reported that they were highly supportive. Noteworthy though is that none of the schools had developed a clear policy where parents and perhaps pupils could refer to if they wanted to learn more about it.

Where setting was introduced, pupils were aware of the fact that they were allocated to sets on the basis of achievement/ability. However, where within-class ability grouping was implemented, most teachers did not explain the basis on which pupils were grouped and tried to 'protect' pupils from the knowledge that they are considered the 'top', 'middle' or 'bottom' group by using alternative, less weighty labels. Others were more explicit with older pupils, in order to make them aware of their own targets. Still, as I observed, both younger and older pupils were well aware of the fact that they were grouped by ability and that tests and teacher observations were the basis for their allocations.

Although there were many differences from one school to another as well as from one teacher to another, the main findings relating to the tasks assigned to the lower and higher groups or sets and teachers' attitudes towards them could be summarised as follows. Lower groups were assigned much simpler tasks than the other groups, even where teachers did not differentiate for the whole class. Moreover, support staff working exclusively with these groups, often provided pupils with the

answers before they had enough time to try on their own. Additionally, teachers tended to have low expectations of them and were more impatient, when they struggled or did not complete their tasks on time, making belittling comments and attributing their 'inefficiency' on a lack of effort or a tendency to be distracted. On the other hand, most teachers were patient and understanding when pupils in top groups/sets struggled, praised them more frequently and overall had a more positive behaviour towards them. Tasks assigned to top ability groups were however not always challenging enough, even when teachers differentiated assignments for everyone. In contrast, tasks in top sets were much more challenging and better tailored to each pupil's needs. Lessons were much more competitive and fast paced and teachers spent considerably less time instructing pupils than they did in non-set classes. Assessments were very frequent and pupils always worked on their tasks independently.

The main differences between set and within-class ability grouped classes are summarised on the table below.

Table 4: Ability grouping vs Setting

Ability groups	**Sets**
More 'relaxed'	More rigid
Informal allocation procedures	Formal allocation procedures
More flexible movement between groups	Less flexible movement
Parents usually not informed about it	Parents better informed
Neither very coherent policy nor consistent throughout the school	Coherent policy although unwritten, same 'rules' applied to all sets

I also summarise on the Table 5 below the various strategies for the identification or provision for gifted and talented pupils implemented at each school.

Table 5: Summary of identification and provision

	School 1	**School 2**	**School 3**	**School 4**	**School 5**
G&T register	x	x	√	√	x
Formal identification	x	x	x	x	x
Setting	√	x	√	x	x
Within-class ability grouping	√	√	√	√	x
Differentiation of instruction	Rarely	Some classes regularly, others never	In sets only	Mainly for less able pupils	Only for less able pupils
Differentiation of tasks	x	x	√	√	x
Standard Challenges	√	√	√	√	Only for non-academic areas
Integrated Challenges	x	√	√	x	x
Peer-teaching	√	√	x	√	√
Different opportunities	√	√	√	√	√

3. Teachers' interpretations, restructuring and application of national or school policies on gifted and talented.

Another very central aim of this study was to explore teachers' awareness of and opinions about relevant key national or local authority policies as well as schools' formal or informal policies to meet the needs of gifted and talented learners. Throughout my interviews and observations, another relevant issue emerged, i.e. teachers' sense of justice in determining where they should focus their attention on. In the following paragraphs I will summarise the key findings relating to these themes.

Regarding their awareness of any relevant national/local authority policies, none of my participants gave any specific examples. In the two English schools, most teachers showed 'relative' awareness of policies, referring indefinitely to mainly older ones which they assumed had been dropped. This was attributed to the fact that some years earlier in England, there was available funding for gifted and talented, G&T Coordinators at LA authority level, who advised teachers on how best to cater for them, professional development opportunities or regular training, but all these have now been cancelled. This was interpreted by some teachers as a change in the government's focus and expectations of teachers. It was concluded that the priority now is to close the gap between high and low achievers, by mainly concentrating on the latter. Most teachers in the two Scottish schools barely engaged with the question and were very vague about their school's policies. In fact it was argued that provision for these pupils relies mainly on teachers' sense of duty and beliefs about justice, rather than on something more solid, such as a school or national policy. Moreover, many English and Scottish teachers confused their policies for setting or ability grouping with policies for the gifted and talented pupils, and discussed about these instead. Finally, every teacher gave a different answer concerning the perceived school approach to gifted and talented education, indicating that whatever their policy was, it certainly was not clear. Only exception to this was teachers from Da Vinci's School, who unanimously agreed that their policy is 'not to hothouse' them, not to 'push them' any further which relates to the different ethos of this school. All these findings relating to policy development and awareness indicate that provision for these pupils in the

schools studied is not cohesive, since there is no consistency in the approach followed and teachers are not well informed about the relevant national or LA guidelines. Thus any steps taken to cater for gifted and talented pupils could be described as fragmentary and insufficient.

Teachers' sense of justice about where they should concentrate their efforts on was very relevant to this question. Most teachers in the participating Scottish schools declared that they focus on lower ability pupils in order to make up for social inequalities. Surprisingly, Da Vinci's School's teachers, where differences in 'ability' or 'attainment' could not be attributed to parents' socio-economic status, still felt their obligation lay exclusively with the children 'who need support'. The belief that less able pupils face challenges at home while more able pupils do not, was strong among teachers in Schools 1 and 2. All teachers but one argued that T.A.s should work exclusively with the less able pupils, and where support staff was scant, they even asked me to help them with their 'bottom groups'. As an L.A. adviser in Brady and Koshy's (2014) claimed, teachers are 'thinking only about the less able and ''floor targets''' (p.258). Nevertheless, teachers in Schools 3 and 4 declared equal commitment to all pupils, without comparing the urgency of one group's needs to the other's, but where they did not set, they devoted most of their time and resources to their less able pupils.

4. Challenges teachers face in their attempt to cater for gifted and talented learners.

The reported or observed challenges were classified as general and specific to gifted and talented. The general challenges related to: 1. a lack of financial resources, especially to employ support staff which would focus on the pupils with ASN, 2. the increasing demands of providing for a very large number of pupils, some of which with ASN or ESL (English as a Second Language) and 3. classroom disruption. In these cases where teachers felt overwhelmed by these challenges, their main objective was to ensure that all pupils finished their non-differentiated assignments. It was indeed observed that a lack of classroom management skills, combined with inexperience and lack of support from the school resulted in the neglect and isolation of some gifted pupils. The specific challenges related to: 1. a lack of guidance and

training in matters of giftedness, 2. an absence of relevant guidelines and funding to promote those pupils' needs, which was interpreted as a reduced state interest and support towards the gifted and talented pupils, and 3. more pressing priorities, such as national exams, inspections or a change in the curricula. Similar observations have been made by Brady and Koshy (2014) who reported that enactment of gifted and talented policies is hindered because teachers are continually bombarded by the government 'with initiatives across many educational areas' (p.259), they feel confused about what giftedness is and do not feel sufficiently guided by the state or the local authority. Moreover, as Smithers and Robinson (2012) observed, the lack/withdrawal of relevant funding is interpreted by teachers as lapsed support from the government and partially justifies their 'inability' to support these pupils. Teachers in the two participating Scottish schools referred almost exclusively to 'general' challenges, while in the English ones solely to the 'specific' ones. This could be interpreted as follows. First, teachers in Scotland had indeed very few T.A.s and struggled to manage overcrowded and diverse classrooms, and second, as most of them admitted, they had little knowledge of or interest in issues relating to the education of gifted and talented pupils and therefore could not be more specific relating difficulties they faced in their attempt to cater for them. On the other hand, Schools 3 and 4 employed a significantly larger number of support staff and were better informed about giftedness. They could thus be more specific in their account of the obstacles to a more enhanced provision for gifted pupils.

12.2 Implications for practice and policy.

In the following paragraphs I will discuss the main implications that the findings of this piece of research can have on practice and policy.

First, the uneasiness and embarrassment many participants felt when discussing about (high) ability, a confusion about who is gifted and who is more able, and the stereotypic view that giftedness is too rare, indicate that teachers may not be able or keen to address those pupils' needs. Perhaps at the root of the problem is the way 'gifted and talented' is still misconstrued as elitist. As Smithers and Robinson

(2012) stated, the concept of giftedness 'has endured a chequered history and has a great deal of emotional baggage attached. Not surprisingly, governments have found it difficult to frame policies, and schools have struggled to implement them (p.44). Associated with this is an overriding finding which emerged from this study that perhaps terminologies ('gifted and talented', 'more able', 'bright') and definitions of them are distracting teachers and make them feel uncomfortable. Researchers and educators should thus question the point of trying to reach consensus on these issues and focus instead on teacher pedagogies which can enhance all pupils' learners.

A sense of duty to tackle social inequalities rules teachers' judgement and determines who is entitled to support, or appropriate resources, typically excluding the gifted. This is what Brady and Koshy (2014) warned against, when they pointed out that if gifted and talented policies are not embedded nationally, 'there is a risk that it will revert to patchy provision, where only committed, well-trained individuals with strong leadership skills will be able to keep 'gifted' education alive in their schools' (p.261). Schools need to discuss about all the above and develop clear policies which ensure that all pupils experience meaningful education. However, the question of how gifted and talented pupils need to be identified, confused all participants in this study, even those who were assigned the role of a Gifted and Talented Coordinator within their schools, most of who pointed associated identification of gifted and talented pupils with ability group or set allocation procedures. Similarly countless studies have focused on the very same question. I believe thus that perhaps, research and discussions on gifted and talented education should disentangle themselves from this onerous and hard-to-resolve questions and focus instead on exploring/developing education strategies which promote each pupil's learning, regardless of how each of them is characterised or defined. Moreover, pre- and in-service training regarding gifted and talented pupils is very important to better inform teachers, to enable them to question their stereotypes and learn how best to provide for them without neglecting other vulnerable pupils.

To this end, policy might be quite significant. As my findings indicate, those teachers who were better informed about relevant policies (national or L(E)A), were also more confident when discussing about provision for these pupils. In the two

English schools however, the fact that relevant funding was withdrawn and G&T Coordinators were removed from LEAs was interpreted as discontinuance of the relevant policies (see Chapter 4). As it was commented by some of the teachers (School 3 and 4), Ofsted reports and policy statements requesting teachers to raise standards, as well as the direction of funding to support less able pupils shaped their practice and determined their priorities, which again indicates the impact developments at the national policy level may have on shaping teacher pedagogies. Therefore, despite their expressed belief that gifted and talented pupils need to be challenged and to be provided tailored opportunities, most teachers felt that their main priority should now be how to raise the lower end's attainment. In fact, according to Smithers and Robinson's (2012) report, schools have been required to 'account through floor targets for how well their weakest pupils do and through standards for how well the average pupil should do' (p.47), which is the case mainly in England and secondarily in Scotland. But there is no firm requirement directing teachers' attention specifically to gifted and talented pupils (Smithers & Robinson, 2012). Moreover, each school's ethos (or arguably the school's policy) in combination with teachers' personal beliefs about the nature of ability and justice influenced the ways they treated their pupils, and specifically their more able ones. For example, in School 5, where there was a stated commitment to cater for all types of ability (e.g. kinaesthetic, creative etc.) but not so for the so-called 'academic' abilities, therefore teachers were against challenging and differentiating instruction for their academically able pupils (see Chapter 6) and were opposed to any kind of ability grouping because they believed it was segregating and only meaningful to more able learners.

An emphasis on national assessments, posed the main challenge for teachers in Schools 3 and 4 and resulted in their devoting most of their time in preparation of them. As Ball (2000) maintained, this leads to a 'kind of schizophrenia. There is the possibility that commitment, judgement and authenticity within practice are sacrificed for impression and performance. There is a 'splitting' between the teachers' own judgements about 'good practice' and students 'needs' on the one hand and the rigours of performance on the other' (p.6). However, 'proficiency for all is an oxymoron', thus setting a single minimum goal or standard above which pupils' attainment should be

raised is an objective which does not recognise human variability (Rothstein, Jacobsen & Wilder, 2006, p.1). Still, such accountability measures, as Smithers and Robinson (2012) indicated, 'do flag up to schools how they should be spending their time. And the main message that comes across at present is that it is the low and middle-range performers who are the priority. This risks the potential high flyers being neglected because they easily meet the accountability standards - although they are not achieving all that they could' (p.47). The principal challenge teachers in Schools 1 and 2 faced, on the other hand, was related to a lack of support staff to enable them to manage over-crowded and diverse classrooms. This too, as teachers argued could be partially tackled with dedicated funding or by decreasing the number of pupils per classroom. Otherwise, gifted education will lose impetus and never become a priority (ibid.).

Another important question which emerged from my findings is why, when there are guidelines about the ways to identify and cater for gifted and talented pupils both in England and Scotland, was none of my participants aware of them? Why had these policies not been discussed within the schools? Why have Ofsted/HMI investigators and Local Authority counsellors not raised teachers' awareness, when 'part of [their] role has been to make sense of government contradictions and to facilitate adequate provision' for gifted and talented learners (Brady & Koshy, 2014, p.261)? Perhaps this could be partially blamed to the fact that many of England's advisers' posts have been cut down, as was indicated by Smithers and Robinsons' (2012) report. Yet, teachers alongside LA officials should question the point of keeping a register of their 'gifted and talented pupils', since it is treated by most teachers as an administrative formality, which they do not reflect upon, and so-called identification is rarely followed be specific educational measures or interventions. All these questions and contradictions could well function as a starting point for future research on the topic.

Another finding with considerable implications for practice is the way teachers perceive differentiation. When I embarked on this research I had not conjectured that there might be so much confusion around differentiation. When my participants declared that their most regular strategy to cater for all their pupils' needs was differentiation, I could not have imagined that by 'differentiation' they mainly meant

same tasks for everyone with additional support offered to the less able pupils, or 'more of the same' tasks for the more able and less for the others (quantity over quality). Nevertheless, similar findings have been reported by other researchers (e.g. Lolly & Makel, 2010). Thus educators, policy makers and researchers should investigate the reasons why such an inclusive and widespread educational practice has not been adequately exploited and why it is often misapplied.

Relevant to the above is this study's other major finding which relates to ability grouping and setting. As my findings indicate, although most classes observed employed either within-class ability grouping or setting, the reasoning behind and the aims underpinning this strategy, the specific allocation procedures and provision for movement between groups or sets, were not always clear or consistent within a school. Moreover, a considerable number of teachers (especially in Schools 1 and 2) did not make appropriate curricular and instructional modifications and only used ability groupings to better manage the classroom. I therefore believe that it is very important for teachers to question the purpose and usefulness of these seating/grouping arrangements, especially when they are not accompanied by differentiation or cooperative learning and make sure that they frequently seek formal or informal feedback from their pupils, in order to make any necessary adaptations.

12.3 Limitations and recommendations for future research.

At this point I will summarise the limitations of this study, most of which have been already mentioned within different chapters of this thesis and then make some suggestions for future research.

First of all, this has been a small-scale study, exploring a small number of schools (five) in England and Scotland. Hence the main findings and conclusions drawn from this study cannot and should not claim to be representative of the whole school population in these jurisdictions. Crucially they cannot even claim to present the 'whole' picture of each of the cases studied, as the time spent within each school was not extensive (approximately fifteen days) and was focused on a small number of classes and teachers (pupils or parents were not included) within each case. Furthermore, since the design of my study does not allow for generalisations to be

made, consequently comparisons between the two jurisdictions cannot be made either. Nevertheless, all the above were not the objectives of this research. Rather the aim was the in-depth investigation of the selected schools in order to better understand how these schools have approached the development of policies and most significantly the teaching pedagogies for gifted and talented pupils. To this end, as diverse cases as possible were selected in order to shed light to the topic from various angles.

In addition to the above, since no assessment/identification instruments were used in this study to determine which pupils were 'gifted' or 'more able', I based my observations on teachers' suggestions on who they believed was gifted or more able. However, most teachers, usually suggested that I focused on their 'top groups' (where ability grouping/setting was employed), and their judgements were mainly based on pupils' attainment rather than potential. Yet, my aim was not to investigate specific gifted and talented learners and their personal experience of the education they received or the progress they made, but rather how teachers treated them and on what basis they decided to set them/group them, to offer differentiated opportunities and 'challenges' and whether to accelerate them or not and crucially, what their understanding of giftedness was and how it affected the decisions they made concerning them. For the same reasons, I did not develop assessment tools to evaluate the 'effectiveness' of these teaching strategies, but drew relevant conclusions based on my observations of how pupils received them (e.g. whether they said they found them too easy or they completed them very quickly), on my professional experience (e.g. where they too repetitive? Did they extend their learning?), and on previous research, where applicable.

Furthermore, as each of the cases had unique characteristics (especially so School 5), and even teachers within each case had very different beliefs and approaches to gifted and talented education, interviews and observations differed a lot across and within cases. Therefore, a single conclusion drawn from this study cannot be true for all the cases researched. However, this weakness is at the same time one of the most significant strengths of my study. It is because of each case's uniqueness that the findings derived from this study are so rich and multidimensional. Nevertheless this multidimensionality and richness of the data collected rendered the detailed and

global discussion of each of the findings an almost impossible task, thus I centred on the most prominent categories and themes that emerged from the first stages of my analysis. It was indeed impossible, within the limits of this thesis to refer to and analyse extensively all points raised by teachers and all observations I made during my field study. However, with the description of each of the cases, just before the main data analysis took place (Chapter 6) I attempted to mitigate this.

It is finally noteworthy, that had this piece of research adopted a different design in order to include a representative sample of schools and thus draw generalisations, it might have been more useful in triggering change in policy and practice. Findings, however, might have been quite different. As I realised quite early on my research journey, there were often considerable differences between what teachers reported to me and what I witnessed when observing their classes. Thus findings based exclusively on teacher surveys, might produce a quite different picture to the one described in this thesis. Further, more extensive research examining gifted educational provision in these two jurisdictions is required. Pupils and parents' voices should be included too, in order to gain a better idea of how school policies and practice are perceived by those to whom they are targeted. Moreover, a study exploring all levels of education provision for these pupils might be very illuminating. To be specific, a survey perhaps, distributed to all Local Authorities in England and Scotland could help draw the landscape of gifted provision in these areas. Finally, targeted discussions with LA education officials and a more detailed analysis of national and local policies would likely explain any differences in provision from one area to another. On the other hand, a study which would not focus exclusively on gifted and talented pupils but would explore teacher pedagogies for all learners (the whole spectrum of abilities) would potentially have greater impact on policy and practice than the one described her, by better illuminating teachers and schools' rationale for favouring one approach to education over another (e.g. inclusive versus individualised instruction/ mixed grouping vs setting etc.) or by unearthing additional challenges that teachers face in their struggle to cater for all pupils. It could also compare various instructional strategies and draw conclusions on the effectiveness of each of them in promoting all learners' needs and enabling thus everyone involved in education

(teacher educators, policy makers, local authority advisors, head teachers, teachers, learning support staff etc.) to re-evaluate their policies and practice. Lastly, as it has been pointed earlier in this chapter, a more focused exploration of teachers' associations between gifted and talented provision and ability grouping practices might prove very illuminating and could shed light into various aspects pertaining to teacher pedagogies aimed to address those pupils' needs.

Bibliography

Adams-Byers, J., Squiller Whitsell, S. and Moon, S.M. (2004). Gifted students' perceptions of the academic and social/emotional effects of homogeneous and heterogeneous grouping. *Gifted Child Quarterly*, *48*(1), pp.7-20.

Ahern, K. J. (1999). Ten tips for reflexive bracketing. *Qualitative health research*, *9*(3), 407-411.

Amabile, T.M. (2001). Beyond talent: John Irving and the passionate craft of creativity. *American psychologist*, *56*(4), p.333.

Ambrose, D. (2009). Large-scale socioeconomic, political, and cultural influences on giftedness and talent. In *International handbook on giftedness* (pp. 885-903). Springer, Dordrecht.

Annels, M. (1996). Grounded Theory Method: Philosophical Perspectives, Paradigm of Inquiry, and Postmodernism. *Qualitative Health Research*, 6:379.

Archer, M., Decoteau, C., Gorski, P., Little, D., Porpora, D., Rutzou, T., Smith, C., Steinmetz, G. and Vrandenberghe, F. (23/12/2016). What is Critical Realism? Theory Section. http://www.asatheory.org/current-newsletter-online/what-is-critical-realism (last accessed 14/09/19)

Asbury, K. and Plomin, R. (2013). *G is for genes: The impact of genetics on education and achievement* (Vol. 24). John Wiley & Sons.

Ashley, M. (2005). Can one teacher know enough to teach year six everything? Lessons from Steiner-Waldorf pedagogy. In *British Educational Research Association, Annual Conference, University of Glamorgan, Pontypridd, UK. Retrieved from http://www. ecswe. org/wren/documents/Can_One_Teacher_Know. pdf*.

Assouline, S. G., Nicpon, M. F., & Doobay, A. (2009). Profoundly gifted girls and autism spectrum disorder: A psychometric case study comparison. *Gifted child quarterly*, *53*(2), 89-105.

Australian Parliament. Senate Select Committee. (1988). The education of gifted and talented children. *Canberra, Australia: Australian Government Publishing Service*.

Australian Parliament. Senate: Employment, Workplace Relations, Small Business and Education References Committee, & Collins, J. (2001). *The education of gifted children*. The Committee.

Bailey, R., Pearce, G., Winstanley, C., Sutherland, M., Smith, C., Stack, N., and Dickenson, M. (2008). A systematic review of interventions aimed at improving the educational achievement of pupils identified as gifted and talented. *EPPI-Centre Social Science Research Unit.* Institute of Education University of London

Baines, E., Blatchford, P. and Kutnick, P. (2003). Changes in grouping practices over primary and secondary school. *International Journal of Educational Research*, *39*(1), 9-34.

Baldwin, A. Y. (2002). Culturally diverse students who are gifted. *Exceptionality*, *10*(2), 139-147.

Ball, S. J. (1999). Labour, learning and the economy: A 'policy sociology' perspective. Cambridge Journal of Education, 29(2), 195-206.

Ball, S. J. (2000). Performativities and fabrications in the education economy: Towards the performative society?. *The Australian Educational Researcher*, *27*(2), 1-23.

Ball, S. J., Maguire, M. and Braun, A. (2012). *How schools do policy: Policy enactments in secondary schools*. Routledge.

Barker-Lunn, J. and Ferri, E. (1970). *Streaming in the primary school: A longitudinal study of children in streamed and non-streamed junior schools* (No. 8). National foundation for educational research in England and Wales.

Basit, T. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational research*, *45*(2), 143-154.

Benbow, C. P. and Stanley, J. C. (1996). Inequity in equity: How" equity" can lead to inequity for high-potential students. *Psychology, Public Policy, and Law*, *2*(2), 249.

Berkowitz, M. W. and Hoppe, M. A. (2009). Character education and gifted children. *High Ability Studies*, *20*(2), 131-142.

Berliner, D. (2011). Rational responses to high stakes testing: The case of curriculum narrowing and the harm that follows. *Cambridge Journal of Education*, *41*(3), 287-302.

Betts, G. (2004). Fostering autonomous learners through levels of differentiation. *Roeper Review*, *26*(4), 190-191.

Betts, G. T. and Neihart, M. (1988). Profiles of the gifted and talented. *Gifted child quarterly*, *32*(2), 248-253.

Bhaskar, R. (2014). *The possibility of naturalism: A philosophical critique of the contemporary human sciences*. Routledge.

Bhaskar, R., (2016). *Enlightened common sense: The philosophy of critical realism*. Routledge.

Blatchford, P., Kutnick, P., Baines, E. and Galton, M. (2003). Toward a social pedagogy of classroom group work. *International Journal of Educational Research*, *39*(1-2), pp.153-172.

Boaler, J. (1997). Setting, social class and survival of the quickest. *British educational research journal*, *23*(5), pp.575-595.

Boaler, J., Wiliam, D. and Brown, M. (2000). Students' experiences of ability grouping-disaffection, polarisation and the construction of failure. *British Educational Research Journal*, *26*(5), pp.631-648.

Borland, J. H. (2009). Myth 2: The gifted constitute 3% to 5% of the population. Moreover, giftedness equals high IQ, which is a stable measure of aptitude: Spinal tap psychometrics in gifted education. *Gifted Child Quarterly*, *53*(4), 236-238.

Borland, J.H., Horton, D., Subotnik, R.F., Chen, S.J., Chun, M., Freeman, C., Goldberg, S. and Yu, J. (2002). Ability grouping and acceleration of gifted students: articles from the Roeper Review. *Roeper Review*, *24*(3), pp.100-100.

Braddock, J. H. and Slavin, R.E. (1992). *Why Ability Grouping Must End: Achieving Excellence and Equity in American Education*. Centre for Research on Effective Schooling for Disadvantaged Students.

Brady, M., & Koshy, V. (2014). Reflections on the implementation of the Gifted and Talented policy in England, 1999–2011. *Gifted Education International*, *30*(3), 254-262.

Bragg, S. (2016). Perspectives on 'Choice and Challenge'in primary schools. *Improving Schools*, *19*(1), 80-93.

Braun, A., Maguire, M. and Ball, S. J. (2010). Policy enactments in the UK secondary school: Examining policy, practice and school positioning. *Journal of Education Policy*, *25*(4), 547-560.

Brighton, C. M., Hertberg, H. L., Moon, T. R., Tomlinson, C. A. and Callahan, C. M. (2005). The Feasibility of High-end Learning in a Diverse Middle School. *National Research Center on the Gifted and Talented*.

British Broadcasting Corporation (BBC) (5/11/2002). McConnell's schooling vision. Available online at: http://news.bbc.co.uk/1/hi/scotland/2402185.stm. (Last accessed: 13/11/2018).

British Broadcasting Corporation (BBC) (2011). Scottish schools braced for council funding cuts. Available online at: https://www.bbc.co.uk/news/uk-scotland-12382122. (Last accessed: 08/11/2018).

Brown, E., Avery, L., Van Tassel-Baska, J., Worley, B. B. and Stambaugh, T. (2006). A five-state analysis of gifted education policies. *Roeper Review*, *29*(1), 11-23.

Brown, S. W., Renzulli, J. S., Gubbins, E. J., Siegle, D., Zhang, W. and Chen, C. H. (2005). Assumptions underlying the identification of gifted and talented students. *Gifted Child Quarterly*, *49*(1), 68-79.

Burgess, S. M., Propper, C., Slater, H. and Wilson, D. (2005). Who wins and who loses from school accountability? The distribution of educational gain in English secondary schools.

Caldas, S. J. and Bankston, C. (1997). Effect of school population socioeconomic status on individual academic achievement. *The Journal of Educational Research*, *90*(5), 269-277.

Callahan, C. M. and Miller, E. M. (2005). A child-responsive model of giftedness. In Sternberg, R.J. and Davidson, J.E. (Eds.): *Conceptions of giftedness*, *2*, 38-51.

Calvert, E. (2018). Identification and Assessment in a K-12 Talent Development Framework. In Eds. Olszewski-Kubilius, P., Subotnik, R. and Worrell, F., (2018). *Talent Development as a Framework for Gifted Education: Implications for Best Practices and Applications in Schools*. Sourcebooks, Inc..

Campbell, R.J., Muijs, R.D., Neelands, J.G.A., Robinson, W., Eyre, D. and Hewston, R. (2007). The social origins of students identified as gifted and talented in England: a geo-demographic analysis. *Oxford Review of Education*, 33(1), 103-120.

Carman, C. A. (2011). Stereotypes of giftedness in current and future educators. *Journal for the Education of the Gifted*, *34*(5), 790-812.

Carman, C. A. (2013). Comparing apples and oranges: Fifteen years of definitions of giftedness in research. *Journal of Advanced Academics*, *24*(1), 52-70.

Case, P., Case, S. and Catling, S. (2000). Please show you're working: a critical assessment of the impact of OFSTED inspection on primary teachers. *British Journal of Sociology of Education*, *21*(4), 605-621.

Casey, R. and Koshy, V. (2013). Gifted and talented education: The English policy highway at a crossroads?. *Journal for the Education of the Gifted*, *36*(1), 44-65.

Chan, D. W. (2000). Exploring identification procedures of gifted students by teacher ratings: Parent ratings and student self-reports in Hong Kong. *High Ability Studies*, *11*(1), 69-82.

Charmaz, K. (2006). *Reconstructing grounded theory*. Sage: London

Charmaz, K. (2014). *Constructing grounded theory*. London: Sage.

Charmaz, K. and Mitchell, R. G. (2001). Grounded theory in ethnography. In Atkinson, P., Coffey, A., Delamont, S., Lofland, J. and Lofland L. (2008) (Eds.) *Handbook of ethnography*, *160*, 174.

Chessor, D. (2012). Welcome change of focus from individual identification to a systemic process in gifted education. *High Ability Studies*, *23*(1), pp.35-37.

Clark, M. M. (1997). Education in Scotland: policy and practice from pre-school to secondary. In Clark, M.M. and Munn, P. (Eds.) (1997) *Education in Scotland,* Psychology Press.

Clinkenbeard, P. R. (2012). Motivation and gifted students: Implications of theory and research. *Psychology in the Schools*, *49*(7), 622-630.

Coenen, M. E. (2002). Using gifted students as peer tutors: An effective and beneficial approach. *Gifted Child Today*, *25*(1), 48-55.

Cohen, L., Manion, L. and Morrison, K. (2018). *Research Methods in Education*. 8th Edition, New York: Routlege.

Colangelo, N., Assouline, S. G., & Gross, M. U. (2004). A Nation Deceived: How Schools Hold Back America's Brightest Students. The Templeton National Report on Acceleration. Volume 1. *Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development (NJ1)*.

Colangelo, N., Assouline, S. G. and Gross, M. U. (2004). A Nation Deceived: How Schools Hold Back America's Brightest Students. The Templeton National Report on Acceleration. Volume 2. *Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development (NJ1)*.

Coleman, J. S., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfield, F. and York, R. (1966). Equality of educational opportunity. Washington, DC: U.S. Government Printing Office

Coleman, L. J. (2004). Point/counterpoint: Is consensus on a definition in the field possible, desirable, Necessary?. *Roeper Review*, *27*(1), 10-11.

Collins, J. (2001). The education of gifted children: Inquiry into the education of gifted children. *Senate Employment, Workplace Relations, Small Business and Education References Committee*.

Colvin, G. (2008). *Talent is Overrated: What really seperates world-class performers from everybody else.*

Connolly, P. (1998). "Dancing to the Wrong Tune'': Ethnography, Generalisation and Research on Racism in Schools. In Eds Connolly, P. and Troyna B. (1998), *Researching Racism in Education: Politics, Theory and Practice*, Open University, 1998, pp. 122–39.

Connor, C.M., Piasta, S.B., Fishman, B., Glasney, S., Schatschneider, C., Crowe, E., Underwood, P. and Morrison, F.J. (2009). Individualizing student instruction precisely: Effects of child by instruction interactions on first graders' literacy development. *Child development*, *80*(1), p.77.

Copenhaver, R. W. and McIntyre, D. J. (1992). Teachers' perception of gifted students. *Roeper Review*, *14*(3), 151-153.

Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative sociology*, 13(1), 3-21.

Cramer, R. H. (1991). The education of gifted children in the United States: A Delphi study. *Gifted Child Quarterly*, *35*(2), 84-91.

Craven, R. G., Marsh, H. W. and Print, M. (2000). Gifted, streamed and mixed-ability programs for gifted students: Impact on self-concept, motivation, and achievement. *Australian Journal of Education*, *44*(1), 51-75.

Creswell. J.W. (2013). Steps in conducting a scholarly mixed methods study. Discipline-Based Education Research Group Discussion on 14/11/2013.

Creswell, J.W. and Poth, C.N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Cross, T.L., Cassady, J.C., Dixon, F.A. and Adams, C.M. (2008). The psychology of gifted adolescents as measured by the MMPI-A. *Gifted Child Quarterly*, *52*(4), pp.326-339.

Crotty, M. (1998). *The foundations of social research*. London: Sage.

Cruickshank, J., 2002. Critical realism and critical philosophy: On the Usefulness of philosophical problems. *Journal of Critical Realism*, *1*(1), pp.49-66.

Davidson, J. (2001). Images of setting in the primary classroom. *Scottish Educational Review*, 33(2), 183e191.

Davies, J., Hallam, S. and Ireson, J. (2003). Ability groupings in the primary school: issues arising from practice. *Research papers in Education*, *18*(1), 45-60.

Deary, I.J., Whalley, L.J. and Starr, J.M. (2009). *A lifetime of intelligence: Follow-up studies of the Scottish mental surveys of 1932 and 1947*. American Psychological Association.

De Boer, G.C., Minnaert, A.E. and Kamphof, G. (2013). Gifted education in the Netherlands. *Journal for the Education of the Gifted*, *36*(1), pp.133-150.

Delisle, J. (2003). To be or to do: Is a gifted child born or developed?. *Roeper Review*, *26*(1), 12.

Denton, C. and Postlethwaite, K. (1985). *Able children: Identifying them in the classroom*. Nfer-Nelson.

Denzin, N. K. (1978). The research act: A theoretical orientation to sociological methods. New York: McGraw-Hill.

Department for Children, Schools and Families (DCSF) (2009) Gifted and Talented Education: Guidance on addressing under-achievement –planning a whole-school approach. The National Strategies. London: Department for Children,Schools and Families.

Department for Education (1993). *Improving Primary Education*- Patten (DfE News 16/93). London: DfE

Department for Education and Skills (2005). *The Schools White Paper: Higher Standards Better Schools for All*. London: DfES

Department for Education and Skills (2003). *Every Child Matters*. Green Paper, Cm. 5860. London: The Stationery Office (TSO).

Department for Education (2014). *Phonics screening check and national curriculum assessments at key stage 1 in England, 2014*. National Statistics

Department of Health (1989). *The Children Act Report, 1989*. London, Stationary Office.

Department of Health (2004). *The Children Act Report 2004*. London, Stationary Office.

Dey, I. (1999). *Grounding grounded theory. Guidelines for qualitative inquiry.* Academic Press.

Dey, I. (2003). *Qualitative data analysis: A user friendly guide for social scientists*. Routledge.

Diezmann, C. M. And Watters, J. J. (2000). Catering for mathematically gifted elementary students: Learning from challenging tasks. *Gifted Child Today*, *23*(4), 14-52.

Douglas, D. (2004). Self-advocacy: Encouraging students to become partners in differentiation. *Roeper Review*, *26*(4), 223-228.

Easton, F. (1997). Educating the whole child,"head, heart, and hands": Learning from the Waldorf experience. *Theory into Practice*, *36*(2), pp.87-94.

Easton, G. (2010). Critical realism in case study research. *Industrial marketing management*, *39*(1), pp.118-128.

Eddles-Hirsch, K., Vialle, W., Rogers, K. B. and McCormick, J. (2010). "Just Challenge Those High-Ability Learners and They'll Be All Right!". The Impact of Social Context and Challenging Instruction on the Affective Development of High-Ability Students. *Journal of Advanced Academics*, *22*(1), 106-128.

Education Culture and Sport Committee (2003). Inquiry into the Purposes of Scottish Education, 6th Report. Available online at: http://archive.scottish.parliament.uk/business/committees/historic/education/reports-03/edr03-06-vol01-01.htm (last accessed 08/11/2018)

Ericsson, K.A., Krampe, R.T. and Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological review*, *100*(3), p.363.

Ericsson, K.A., Prietula, M.J. and Cokely, E.T. (2007). The making of an expert. *Harvard business review*, *85*(7/8), p.114.

Evelthondos, K. (2008). Gifted children: Stereotypes and Reality. In: Matsagouras E., eds. *Teaching High Ability pupils: Differentiated inclusive education.* Athens: Gutenberg.

European Commission, (2006). Specific educational measures to promote all forms of giftedness at school in Europe. Working document, June 2006. Accessed on-line at: https://publications.europa.eu/en/publication-detail/-/publication/7de9cb30-5138-4a0a-a574-cd55ef94ef36.

Eyre, D. (1997a, 2001). *Able Children in Ordinary Schools.* London: David Fulton Publishers Ltd.

Eyre, D. (2004). Gifted education: the English model. *Warwick: National Academy for Gifted and Talented Youth*.

Eyre, D. (2007). Structured Tinkering: Improving provision for the gifted in ordinary schools. *Gifted and talented international*, *22*(1), 31-38.

Eyre, D. (2009). The English model of gifted education. In: Shavinina L.V. (eds) *International Handbook on Giftedness*. Springer, Dordrecht.

Eyre, D., Coates, D., Fizpatrick, M., Higgins, C., McClure, L., Wilson, H. and Chamberlin, R. (2002). Effective teaching of able pupils in the primary school: The findings of the Oxfordshire effective teachers of able pupils project. *Gifted Education International*, *16*(2), 158-169.

Eyre, D. and Geake, J. (2002). Trends in research into gifted and talented education in England. *Gifted and Talented International*, *17*(1), 13-21.

Fantilli, R. D. and McDougall, D. E. (2009). A study of novice teachers: Challenges and supports in the first years. *Teaching and teacher education*, *25*(6), 814-825.

Feldhusen, J. F. (2005). Giftedness, talent, expertise, and creative achievement. In Sternber and Davidson (2005) (Eds): *Conceptions of giftedness*, *2*, 64-79.

Feldman, D.H. (2013). A developmental, evolutionary perspective on giftedness. IN Borland, J.H. (Eds.): *Rethinking Gifted Education.*

Fiedler, E.D., Lange, R.E. and Winebrenner, S. (1993). In search of reality: Unravelling the myths about tracking, ability grouping and the gifted. *Roeper Review*, *16*(1), pp.4-7.

Fletcher, A.J. (2017). Applying critical realism in qualitative research: methodology meets method. *International Journal of Social Research Methodology*, *20*(2), pp.181-194.

Florian, L. and Rouse, M. (2009). The inclusive practice project in Scotland: Teacher education for inclusive education. *Teaching and teacher education*, *25*(4), 594-601.

Ford, D. Y. (1995). A Study of Achievement and Underachievement among Gifted, Potentially Gifted, and Average African-American Students. *ERIC Digest.*

Ford, D. Y. (2010). Multicultural issues: Culturally responsive classrooms: Affirming culturally different gifted students. *Gifted Child Today*, *33*(1), 50-53.

Ford, D. Y. and Thomas, A. (1997). Underachievement among Gifted Minority Students: Problems and Promises. *ERIC Digest E544*.

Fossey, E., Harvey, C., McDermott, F. and Davidson L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, Vol.36, pp.717-732.

França-Freitas, M.L.P.D., Del Prette, A. and Del Prette, Z.A.P. (2014). Social skills of gifted and talented children. *Estudos de Psicologia (Natal)*, *19*(4), pp.288-295.

Franson, C. (1999). Mainstreaming learners of English as an additional language: The class teacher's perspective. *Language Culture and Curriculum*, *12*(1), 59-71.

Fraser-Seeto, K. (2013). Pre-service teacher training in gifted and talented education: An Australian perspective. *Journal of Student Engagement: Education Matters*, *3*(1), 29-38.

Freeman, J. (1991). *Gifted children grown up*. David Fulton Publishers.

Freeman, J. (1995). Annotation: Recent studies of giftedness in children. *Journal of Child Psychology and Psychiatry*. Vol.36, No 4, pp.531-547.

Freeman, J. (1996). Self-reports in Research on High Ability. *High ability studies*, *7*(2), 191-201.

Freeman, J. (1997). Actualising talent: implications for teachers and schools. *Support for Learning*, *12*(2), 54-59.

Freeman, J. (2001). *Gifted Children Grown Up*. London: David Fulton Publishers.

Freeman, J. (2002). Out-of-school educational provision for the gifted and talented around the world. *A report for the Department of Education and Skills. London*.

Freeman, J. (2005). 'Permission to be gifted: how conceptions of giftedness can change lives', in R. Sternberg & J. Davidson eds. *Conceptions of Giftedness*, Cambridge: Cambridge University Press, pp. 80-97.

Freeman, J. (2011, April). What the World does for the gifted and talented. In *Conferencia en el Congreso de Budapest de*.

French, L.R., Walker, C.L. and Shore, B.M. (2011). Do gifted students really prefer to work alone?. *Roeper Review*, *33*(3), pp.145-159.

Gagné, F. (2004). Transforming gifts into talents: The DMGT as a developmental theory. *High ability studies*, *15*(2), 119-147.

Gallagher, S., Smith, S.R. and Merrotsy, P. (2011). Teachers' perceptions of the socioemotional development of intellectually gifted primary aged students and

their attitudes towards ability grouping and acceleration. *Gifted and Talented International*, *26*(1-2), pp.11-24.

Gardner, H. (1983/1993). *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.

Gates, J. (2010). Children with gifts and talents: Looking beyond traditional labels. *Roeper Review*, *32*(3), 200-206.

Geake, J. G. and Gross, M. U. (2008). Teachers' negative affect toward academically gifted students: An evolutionary psychological study. *Gifted Child Quarterly*, *52*(3), 217-231.

Gentry, M., Rizza, M. G. and Owen, S. V. (2002). Examining perceptions of challenge and choice in classrooms: The relationship between teachers and their students and comparisons between gifted students and other students. *Gifted Child Quarterly*, *46*(2), 145-155.

George, D. (2013). *Gifted education: Identification and provision*. David Fulton Publishers.

George, P. S. (2005). A rationale for differentiating instruction in the regular classroom. *Theory into practice*, *44*(3), 185-193.

George, P. S. and Rubin, K. (1992). Tracking and Ability Grouping in Florida: Educator's Perceptions. *Florida Educational Research Bulletin*, *23*, n3-4.

Getzels, J. W. and Jackson, P. W. (1962). Creativity and intelligence: Explorations with gifted students.

Gibbs, G. (2007). *Analyzing Qualitative Data.* SAGE Publications.

Gibbs, G. R. (2012). Grounded theory, coding and computer-assisted analysis. In: Understanding Research for Social Policy and Social Work: Themes, Methods and Approaches. Understanding Welfare: Social Issues, Policy and Practice series

. Policy Press, Bristol, UK, pp. 337-343. Available online at: http://eprints.hud.ac.uk/id/eprint/13124/ (Last accessed: 08/11/2018).

Gillard D. (2008), *Us and Them: a history of pupil grouping policies in England's schools,* www.educationengland.org.uk/articles/27grouping.html.

Gillborn, D. and Youdell, D. (2000). *Rationing Education.* Buckingham, Open University Press.

Gillies, D. (2008). The politics of Scottish education. In Bryce, T.G.K. and Humes, W.M. (2008) (Eds.): *Scottish Education beyond devolution*, Edinburgh University Press.

Gisbert, D. and Font, C.M. (2008). The impact of peer tutoring on the improvement of linguistic competence, self-concept as a writer and pedagogical satisfaction. *School Psychology International*, *29*(4), 481-499.

Glaser, B.G. and Strauss A.L. (1967). *The Discovery of Grounded Theory: strategies for qualitative research*. Chicago: Aldine.

Goodwin, B. (2012). Research says new teachers face three common challenges. *Educational Leadership*, *69*(8), 84-85.

Gross, M. U. M. (1999). Inequity in equity: The paradox of gifted education in Australia. *Australian Journal of Education*, *43*(1), 87-103.

Guba, E. G. and Lincoln, Y. S. (1989). *Fourth Generation Evaluation*. Beverly Hills, CA: Sage.

Guilford, J. (1951). Creativity, *American Psychologist*, 5, 444-454.

Hallam, S., Ireson, J., Lister, V., Chaudhury, I. A. and Davies, J. (2003). Ability grouping practices in the primary school: A survey. *Educational Studies*, *29*(1), 69-83.

Hallam, S. and Parsons, S. (2013). The incidence and make up of ability grouped sets in the UK primary school. *Research Papers in Education*, *28*(4), 393-420.

Hamilton, L. C. (2001). *Constructions of higher ability in two maintained and two independent schools*. Thesis submitted at Stirling University.

Hamilton, L. (2002). Constructing pupil identity: Personhood and ability. *British Educational Research Journal*, *28*(4), 591-602.

Hamilton, L. and Brown, J. (2005). 'Judgement day is coming!': young people and the examination process in Scotland. *Improving Schools*, *8*(1), 47-57.

Hamilton, L. and Corbett-Whittier, C. (2013). *Using Case Study in Education Research*. SAGE Publishing.

Hamilton, L. and O'Hara, P. (2011). The tyranny of setting (ability grouping): Challenges to inclusion in Scottish primary schools. *Teaching and Teacher Education*, *27*(4), 712-721.

Hany, E. A. (1993). How teachers identify gifted students: feature processing or concept based classification. *European Journal for High Ability*, *4*(2), 196-211.

Hany, E. A. (1997). Modelling teachers' judgment of giftedness: A methodological inquiry of biased judgment. *High ability studies*, *8*(2), 159-178.

Hart, J. T. (1971). The inverse care law. *The Lancet*, *297*(7696), 405-412.

Hartas, D., Lindsay, G. and Muijs, D. (2008). Identifying and selecting able students for the NAGTY summer school: emerging issues and future considerations. *High Ability Studies*, *19*(1), 5-18.

Hébert, T. P. and Reis, S. M. (1999). Culturally diverse high-achieving students in an urban high school. *Urban education*, *34*(4), 428-457.

Heller, K. A. (2004). Identification of gifted and talented students. *Psychology Science*, *46*(3), 302-323.

Heller, K. A. (2007). Scientific ability and creativity. *High Ability Studies*, *18*(2), 209-234.

Heller, K. A., & Perleth, C. (2008). The Munich High Ability Test Battery (MHBT): A Multidimensional, Multimethod Approach. *Psychology Science*, *50*(2), 173.

Her Majesty's Inspectorate (HMI) (1978). Report on Primary Education: The conclusions. London: Her Majesty's Stationery Office.

Her Majesty's Inspectorate (HMI) (1979). Aspects of secondary education in England: A Survey by HM Inspectors of Schools. *London: Her Majesty's Stationary Office*.

Herrmann, A. and Nevo, B. (2011). Gifted education in German-speaking countries. *Gifted and Talented International*, *26*(1-2), 47-62.

Hertberg-Davis, H. (2009). Myth 7: Differentiation in the regular classroom is equivalent to gifted programs and is sufficient: Classroom teachers have the time, the skill, and the will to differentiate adequately. *Gifted Child Quarterly*, *53*(4), 251-253.

Hewston, R., Campbell, R. J., Eyre, D., Muijs, R. D., Neelands, J. G. A. and Robinson, W. (2005). A Baseline Review of the Literature on Effective Pedagogies for Gifted and Talented Students.(Occasional Paper 5).Higginbottom, G. M. A. (2004). Sampling issues in qualitative research. *Nurse Researcher (through 2013)*, *12*(1), 7.

Hodgen, J. (2007). Setting, streaming and 16 mixed-ability teaching. *Becoming*, 201.

Hoover-Schultz, B. (2005). Gifted underachievement: Oxymoron or educational enigma?. *Gifted Child Today*, *28*(2), 46-49.

House of Commons (1989). The Children Act 1989. London: Her Majesty's Stationary Office. Available at: http://www.legislation.gov.uk/ukpga/1989/41/contents (last accessed: 08/11/2018)

House of Commons. (2010). *The gifted and talented programme: Oral and written evidence*. Children, School and Families Select Committee, February 1, 2010, London: The Stationary Office.

Howley, A., Rhodes, M. and Beall, J. (2009). Challenges facing rural schools: Implications for gifted students. *Journal for the Education of the Gifted*, *32*(4), 515-536.

Humes, W. M. (2003). Policy making in Scottish education. In: Bryce, T.G.K. and Humes, W.M. (2008) (Eds.) *Scottish education beyond devolution*, Edinburgh University Press, 74-85.

Ireson, J. and Hallam, S. (1999). Raising standards: is ability grouping the answer?. *Oxford review of education*, *25*(3), pp.343-358.

Ireson, J., Hallam, S., Hack, S., Clark, H. and Plewis, I. (2002). Ability grouping in English secondary schools: effects on attainment in English, mathematics and science. *Educational Research and Evaluation*, *8*(3), 299-318.

Ireson, J., Hallam, S. and Hurley, C. (2005). What are the effects of ability grouping on GCSE attainment?. *British educational research journal*, *31*(4), 443-458.

Jackson, B. (1964) *Streaming: an Education System in Miniature*. London: Routlege & Kegan Paul

Jolly, J.L. and Makel, M.C. (2010). No Child Left Behind: The inadvertent costs for high-achieving and gifted students. *Childhood Education*, *87*(1), pp.35-40.

Kanevsky, L. S. and Clelland, D. (2013). Accelerating Gifted Students in Canada: Policies and Possibilities. *Canadian Journal of Education*, *36*(3), 229-271.

Kapusnick, R.A. and Hauslein, C.M. (2001). The ‘silver cup’ of differentiated instruction. *Kappa Delta Pi Record*, *37*(4), 156-159.

Keep, E. (2006). State control of the English education and training system—playing with the biggest train set in the world. *Journal of vocational education and training*, *58*(1), 47-64.

Koshy, V. and Pinheiro-Torres, C. (2013). 'Are we being de-gifted, Miss?': Primary school gifted and talented co-ordinators' responses to the Gifted and Talented Education Policy in England. *British Educational Research Journal*, 39(6), 953-978.

Koshy, V., Pinheiro-Torres, C. and Portman-Smith, C. (2012). The landscape of gifted and talented education in England and Wales: how are teachers implementing policy?. *Research Papers in Education*, *27*(2), 167-186.

Koshy, V. and Robinson, N. M. (2006). Too long neglected: Gifted young children. *European Early Childhood Education Research Journal*, *14*(2), 113-126.

Krisel, S. C. (2018). Programming for Talent Development Inside of School. In Eds. Olszewski-Kubilius, P., Subotnik, R. and Worrell, F. (2018). *Talent Development as a Framework for Gifted Education: Implications for Best Practices and Applications in Schools*. Sourcebooks, Inc..

Kulik, J. A. (2004). Meta-analytic studies of acceleration. In Colangelo et al. (2004) (Eds): *A nation deceived: How schools hold back America's brightest students*, *2*, 13-22.

Kulikand, J.A. and Kulik, C.L.C. (1987). Effects of ability grouping on student achievement. *Equity and Excellence in Education*, *23*(1-2), 22-30.

Kulik, J.A. and Kulik, C.L.C. (1992). Meta-analytic findings on grouping programs. *Gifted child quarterly*, *36*(2), pp.73-77.

Kuncel, N.R., Hezlett, S.A. and Ones, D.S. (2004). Academic performance, career potential, creativity, and job performance: Can one construct predict them all?. *Journal of personality and social psychology*, *86*(1), p.148.

Kuncel, N.R. and Hezlett, S.A. (2010). Fact and fiction in cognitive ability testing for admissions and hiring decisions. *Current Directions in Psychological Science*, *19*(6), pp.339-345.

Kuo, C. C., Maker, J., Su, F. L. and Hu, C. (2010). Identifying young gifted children and cultivating problem solving abilities and multiple intelligences. *Learning and Individual Differences*, *20*(4), 365-379.

Kvale, S. (2008). *Doing interviews*. SAGE qualitative research kit

Lee, J. and Croll, P. (1995) Streaming and Subject Specialism at Key Stage 2: a survey in two local authorities, Educational Studies, 21:2, 155-165

Lewis, A. (2010). Silence in the context of 'child voice'. *Children & Society*, *24*(1), pp.14-23.

Lincoln, Y. S. and Guba, E. G. (1985). *Naturalistic inquiry* (Vol. 75). Sage.

Lupart, J. L., Pyryt, M. C., Watson, S. L. and Pierce, K. (2005). Gifted education and counselling in Canada. *International Journal for the Advancement of Counselling*, *27*(2), 173-190.

Lupton, R. (2005). Social justice and school improvement: improving the quality of schooling in the poorest neighbourhoods. *British educational research journal*, *31*(5), 589-604.

Macfarlane, B. (2010). *Researching with integrity: The ethics of academic enquiry*. New York: Routledge.

MacRae, L. and Lupart, J. L. (1991). Issues in identifying gifted students: How Renzulli's model stacks up. *Roeper Review*, *14*(2), 53-58.

Magnuson, K. A., Meyers, M. K., Ruhm, C. J. and Waldfogel, J. (2004). Inequality in preschool education and school readiness. *American educational research journal*, *41*(1), 115-157.

Makel, M. C., Snyder, K. E., Thomas, C., Malone, P. S., & Putallaz, M. (2015). Gifted students' implicit beliefs about intelligence and giftedness. *Gifted Child Quarterly*, *59*(4), 203-212.

Mandelman, S. D., Tan, M., Aljughaiman, A. M. and Grigorenko, E. L. (2010). Intellectual giftedness: Economic, political, cultural, and psychological considerations. *Learning and Individual Differences*, *20*(4), 287-297.

Manning, S. (2006). Recognizing gifted students: A practical guide for teachers. *Kappa delta Phi record*, *42*(2), 64-68.

Marquez, J. A. and Sawyer, C. B. (1994). Curriculum Extension for the Gifted and Talented Student with Limited English Proficiency. In Malave, L.M. (1994) (Eds): *National Association for Billingual Education (NABE)*

Matsagouras, E. (2008). Introduction. Differentiated Inclusive Teaching: Educational policies, assumptions and practice. In: Matsagouras E., eds. *Teaching High Ability pupils: Differentiated inclusive education.* Athens: Gutenberg.

Matthews, M.S., Ritchotte, J.A. and McBee, M.T. (2013). Effects of schoolwide cluster grouping and within-class ability grouping on elementary school students' academic achievement growth. *High Ability Studies*, *24*(2), pp.81-97.

McBride, N. (1992). Early identification of the gifted and talented students: where do teachers stand?. *Gifted Education International*, *8*(1), 19-22.

McCoach, D. B. and Siegle, D. (2007). What predicts teachers' attitudes toward the gifted?. *Gifted child quarterly*, *51*(3), 246-254.

McPake, J., Harlen, W., Powney, J. and Davidson, J. (1999a). *Teachers' and pupils' days in the primary classroom*. Edinburgh: Scottish Council for Research in Education.

McPake, J., Harlen, W., Powney, J. and Davidson, J. (1999b). *Case studies of setting in primary school classrooms: an extension to the teachers' and pupils' days in the classroom project*. Edinburgh: Scottish Council for Research in Education.

Merriam, S. B. (2009). *Qualitative Research: a guide to design and interpretation*. Revised and expanded from *Qualitative Research and Case Study in Education*. San Francisco: Jossey-Bass.

Mills, C. J. (2003). Characteristics of effective teachers of gifted students: Teacher background and personality styles of students. *Gifted Child Quarterly*, *47*(4), 272-281.

Mills, J., Bonner, A. and Francis K. (2006). The Development of Constructivist Grounded Theory. *International Journal of Qualitative Methods*. 5 (1).

Mintz, J. and Wyse, D. (2015). Inclusive pedagogy and knowledge in special education: addressing the tension. *International Journal of Inclusive Education*, *19*(11), pp.1161-1171.

Montgomery, D. (1996). Differentiation of the Curriculum for the Highly Able. *High Ability Studies*, *7*(1), 25-37.

Moon, S. M. and Reis, S. M. (2004). Acceleration and twice-exceptional students. In Colangelo et al. (2004) (Eds): *A nation deceived: How schools hold back America's brightest students*, *2*, 109-119.

Moon, T. R. and Brighton, C. M. (2008). Primary teachers' conceptions of giftedness. *Journal for the Education of the Gifted*, *31*(4), 447-480.

Mooney, G. and Poole, L. (2004). 'A land of milk and honey'? Social policy in Scotland after Devolution. *Critical Social Policy*, *24*(4), pp.458-483.

Mooney, G. and Scott, G. (2005). *Exploring social policy in the 'new' Scotland*. Policy Press.

Mönks, F. J. (1992). Ein interaktionales Modell der Hochbegabung. In E.A. Hany & H. Nickel (Eds.), *Begabung und Hochbegabung*, 17-22.

Mönks, F. J. and Katzko, M. W. (2005). Giftedness and gifted education. In Sternberg and Davidson (Eds.) *Conceptions of giftedness*, *2*, 187-200.

Mönks, F.J. and Katzko, M.W. (2008). Giftedness: concepts and application. In: Matsaggouras E., eds. *Teaching High Ability pupils: Differentiated inclusive education*. Athens: Gutenberg. Translated in Greek by Sakka E.

Mönks, F. J. and Pflüger, R. (2005). *Gifted education in 21 European countries: Inventory and perspective*. Nijmegen: Radboud University Nijmegen.

Munn, P., Stead, J., McLeod, G., Brown, J., Cowie, M., McCluskey, G., P, Pirrie, A. and Scott, J. (2004). Schools for the 21st century: the national debate on education in Scotland. *Research Papers in Education*, *19*(4), 433-452.

Neal, D. and Schanzenbach, D.W. (2010). Left behind by design: Proficiency counts and test-based accountability. *The Review of Economics and Statistics*, *92*(2), pp.263-283.

Neber, H., Finsterwald, M. and Urban, N. (2001). Cooperative learning with gifted and high-achieving students: A review and meta-analyses of 12 studies. *High Ability Studies*, *12*(2), pp.199-214.

Neihart, M. (1999). The impact of giftedness on psychological well-being: What does the empirical literature say?. *Roeper Review*, *22*(1), 10-17.

Neihart, M. (2007). The socioaffective impact of acceleration and ability grouping: Recommendations for best practice. *Gifted Child Quarterly*, *51*(4), pp.330-341.

Neisser, U. (1979). The concept of intelligence. *Intelligence*, *3*(3), 217-227.

Neumeister, K. L. S., Adams, C. M., Pierce, R. L., Cassady, J. C. and Dixon, F. A. (2007). Fourth-grade teachers' perceptions of giftedness: Implications for identifying and serving diverse gifted students. *Journal for the Education of the Gifted*, *30*(4), 479-499.

Newby, P. (2010). *Research Methods for Education*. London: Longman.

North Lanarkshire Council (2014). *Education Strategy for Inclusion*. Education Department

Oakes, J. (1986). Keeping track, part 1: The policy and practice of curriculum inequality. *Phi Delta Kappan*, *68*(1), pp.12-17.

OFSTED (Office for Standards in Education), (1998). *Setting in Primary Schools: A report from the Office of Her Majesty's Chief Inspector of Schools*. London: Ofsted.

OFSTED (Office for Standards in Education), (2001). *Providing for gifted and talented pupils: An evaluation of Excellence in Cities and other grant-funded programmes (HMI 334).* London: Office for Standards in Education.

Olszewski-Kubilius, P. and Clarenbach, J. (2012). Unlocking Emergent Talent: Supporting High Achievement of Low-Income, High Ability Students. *National Association for Gifted Children (NJ1)*.

Olszewski-Kubilius, P., Subotnik, R. and Worrell, F. (2018). *Talent Development as a Framework for Gifted Education: Implications for Best Practices and Applications in Schools*. Sourcebooks, Inc..

Ozga, J. (1999). *Policy research in educational settings: Contested terrain*. Buckingham: Open University Press

Ozga, J., Baxter, J., Clarke, J., Grek, S. and Lawn, M. (2013). The politics of educational change: Governance and school inspection in England and Scotland. *Swiss Journal of Sociology*, *39*(2), 37-55.

Parliament of the United Kingdom (1998). *Scotland Act 1998*. C.46.

Parliamentary Assembly Council of Europe (PACE) (1994). Recommendation 1248. Education for Gifted children. Assembly debate on 7 October 1994, Strasbourg, France. Available at: http://assembly.coe.int/main.asp?Link=/documents/adoptedtext/ta94/erec1248.htm (last accessed 8 November 2018).

Parsons, S. and Hallam, S. (2014). The impact of streaming on attainment at age seven: evidence from the Millennium Cohort Study. *Oxford Review of Education*, *40*(5), 567-589.

Paterson, L. (1998). Education, local government and the Scottish Parliament. *Scottish Educational Review*, *30*, 52-60.

Paterson, L. (2003). The three educational ideologies of the British Labour Party, 1997-2001. *Oxford Review of Education*, *29*(2), 165-185.

Patrick, H., Bangel, N.J., Jeon, K.N. and Townsend, M.A. (2005). Reconsidering the issue of cooperative learning with gifted students. *Journal for the Education of the Gifted*, *29*(1), pp.90-108.

Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work*, *1*(3), 261-283.

Pegnato, C. W., & Birch, J. W. (1959). Locating gifted children in junior high schools: A comparison of methods. *Exceptional children*, *25*(7), 300-304.

Perry, L.B. and McConney, A. (2010). Does the SES of the school matter? An examination of socioeconomic status and student achievement using PISA 2003. *Teachers College Record*, *112*(4), pp.1137-1162.

Persson, R. S. (1998). Paragons of virtue: Teachers' conceptual understanding of high ability in an egalitarian school system. *High Ability Studies*, *9*(2), 181-196.

Persson, R. S. (2007). The Myth of the Antisocial Genius: A Survey Study of the Socio-Emotional Aspects of High-IQ Individuals. *Gifted and Talented International*, *22*(2), 19-34.

Persson, R.S. (2009). Gifted education in Europe. In Barbara A. Kerr (ed.) (2009): *Encyclopedia of Giftedness, Creativity, and Talent* (Volume One). Thousand Oaks, CA: Sage Publications.

Persson, R. S. (2010). Experiences of intellectually gifted students in an egalitarian and inclusive educational system: A survey study. *Journal for the Education of the Gifted*, 33(4), 536-569.

Peterson, J. S. (2009). Myth 17: Gifted and talented individuals do not have unique social and emotional needs. *Gifted Child Quarterly*, *53*(4), 280-282.

Peterson, J. S. and Colangelo, N. (1996). Gifted achievers and underachievers: A comparison of patterns found in school files. *Journal of Counseling & Development*, *74*(4), 399-407.

Pfeiffer, S. I. (2003). Challenges and opportunities for students who are gifted: What the experts say. *Gifted Child Quarterly*, *47*(2), 161-169.

Pfeiffer, S. I. (2012). Current perspectives on the identification and assessment of gifted students. *Journal of Psychoeducational Assessment*, *30*(1), 3-9.

Pfeiffer, S. I. and Stocking, V. B. (2000). Vulnerabilities of academically gifted students. *Special Services in the Schools*, *16*(1-2), 83-93.

Phillips, N. and Lindsay, G. (2006). Motivation in gifted students. *High Ability Studies*, *17*(1), 57-73.

Polyzoi, E., Klassen, C.F., Babb, J., Gialamas, S. and Perakis Evloyias C. (2011) Engaging the Minds of our Youth: The High Performing Student Program at ACS Athens. In Klassen, C.F. and Polyzoi, E. (2011) (Eds.): *Investing in Gifted and Talented Learners: An International Perspective.*

Porter, L. (2006). Twelve myths of gifted education. Available online at: http://www.thinkingahead.com.au/wp-content/uploads/2013/03/Twelve_myths_of_gifted_education-Porter.pdf (last accessed: 08/11/2018).

Powell, J. (2002). The changing conditions of social work research. *British Journal of Social Work*, 32(1), 17-33.

Power, S., & Whitty, G. (1999). New Labour's education policy: first, second or third way?. *Journal of Education Policy*, *14*(5), 535-546.

Preckel, F., Baudson, T.G., Krolak-Schwerdt, S. and Glock, S. (2015). Gifted and maladjusted? Implicit attitudes and automatic associations related to gifted children. *American Educational Research Journal*, *52*(6), pp.1160-1184.

Pring, R. (2000) *Philosophy of Educational Research*. London: Continuum.

Pring, R. (2014). Traditions of Inquiry: Should We Talk of Different Paradigms After All?. In Reid, A., Hart E. and Peters, M.(2014) *A companion to research in education* (pp. 27-30). Springer, Dordrecht.

Prior, S. (2011). Student voice: What do students who are intellectually gifted say they experience and need in the inclusive classroom?. *Gifted and Talented International*, *26*(1-2), 121-129.

Probst, B. (2015). The eye regards itself: Benefits and challenges of reflexivity in qualitative social work research. *Social Work Research*, *39*(1), 37-48.

Proctor, J.D. (1998). The social construction of nature: Relativist accusations, pragmatist and critical realist responses. *Annals of the Association of American Geographers*, *88*(3), pp.352-376.

Programme for International Student Assessment. (2007). *PISA 2006: Science Competencies for Tomorrow's World. Volume 1, Analysis*. OECD Publishing.

Randoll, D. and Peters, J. (2015). Empirical research on Waldorf education. *Educarem Revista*, (56), pp.33-47.

Rasmussen, A. and Lingard, B. (2018). Excellence in education policies: Catering to the needs of gifted and talented or those of self-interest?. *European Educational Research Journal*, *17*(6), pp.877-897.

Reis, S. M., Gubbins, E. J., Briggs, C. J., Schreiber, F. J., Richards, S., Jacobs, J. K.,Eckert, R.D. and Renzulli, J. S. (2004). Reading instruction for talented

readers: Case studies documenting few opportunities for continuous progress. *Gifted Child Quarterly*, *48*(4), 315-338.

Reis, S. M., Westberg, K.L., Kulikowich, J., Caillard, F., Hebert, T., Purcell, J.H., Rogers, J.B. and Smist, J.M. (1993). Why Not Let High Ability Students Start School in January? The Curriculum Compacting Study. Research Monograph 93106.

Reis, S.M. and McCoach, D.B. (2000). The underachievement of gifted students: What do we know and where do we go?. *Gifted Child Quarterly,* 44(3), 152-170.

Reis, S. M. and Renzulli, J. S. (2009). Myth 1: The gifted and talented constitute one single homogeneous group and giftedness is a way of being that stays in the person over time and experiences. *Gifted Child Quarterly*, *53*(4), 233-235.

Reis, S. M. and Renzulli, J. S. (2010). Is there still a need for gifted education? An examination of current research. *Learning and individual differences*, *20*(4), 308-317.

Renzulli, J. S. (1990). A practical system for identifying gifted and talented students. *Early Child Development and Care*, *63*(1), 9-18.

Renzulli, J.S. (1994). *Schools for talent development: A practical plan for total school improvement*. Creative Learning Pr.

Renzulli, J. S. (1997). How to Develop an Authentic Enrichment Cluster. *National Research Center on the Gifted and Talented,* p.1-18.

Renzulli, J. S. (1999). What is this thing called giftedness, and how do we develop it? A twenty-five year perspective. *Journal for the Education of the Gifted*, *23*(1), 3-54.

Renzulli, J. S. (2002). Emerging conceptions of giftedness: Building a bridge to the new century. *Exceptionality*, *10*(2), 67-75.

Renzulli, J. S. (2012). Reexamining the role of gifted education and talent development for the 21st century: A four-part theoretical approach. *Gifted Child Quarterly*, *56*(3), 150-159.

Renzulli, J. S. and Owen, S. V. (1983). The revolving door identification model: If it ain't busted don't fix it if you don't understand it don't nix it.

Renzulli, J. S. and Reis, S. M. (1985). *The schoolwide enrichment model: A comprehensive plan for educational excellence*. Mansfield Center, CT: Creative Learning Press, 1985.

Renzulli, J.S. and Reis, S.M. (1997). *The schoolwide enrichment model: A how-to guide for educational excellence*. Creative Learning Press, Inc., PO Box 320, Mansfield, CT 06250.

Renzulli, J. S. and Reis, S. M. (2002). What is Schoolwide Enrichment: How Gifted Programs Relate to Total School Improvement. *Gifted Child Today*, *25*(4), 18-64.

Resnick, L. B. (Ed.). (1976). The nature of intelligence. Oxford, England: Lawrence Erlbaum.

Riddell, S. (2009). Social justice, equality and inclusion in Scottish education. *Discourse: Studies in the Cultural Politics of Education*, *30*(3), pp.283-296.

Riddell, S. and Weedon, E. (2010). Reforming special education in Scotland: tensions between discourses of professionalism and rights. *Cambridge Journal of education*, *40*(2), 113-130.

Ritchie, J. (2003). Chapter 2: The Application of Qualitative Methods to Social Research. In Ritchie, J. and Lewis, J. (2003) *Qualitative Research Practice: A guide for Social Science Students and Researchers:* SAGE

Ritchie, J., Lewis, J. and Elam, G. (2003). Chapter 4: Designing and selecting samples. In Ritchie, J. and Lewis, J. (2003) *Qualitative Research Practice: A guide for Social Science Students and Researchers:* SAGE.

Ritchie, J., Spencer, L. and O'Connor, W. (2003). Chapter 9: Carrying out Qualitative Analysis. In Ritchie, J. and Lewis, J. (2003) *Qualitative Research Practice: A guide for Social Science Students and Researchers:* SAGE

Ritchie, S. (2015). *Intelligence: All that matters*. Hodder & Stoughton.

Ritchie, S. J. and Tucker-Drob, E. M. (2018). How much does education improve intelligence? A meta-analysis. *Psychological science*, *29*(8), 1358-1369.

Robertson, E. (1991). Neglected Dropouts: The Gifted and Talented. *Equity & Excellence in Education*, *25*(1), 62-73.

Robinson, A. (1990). Cooperation or exploitation? The argument against cooperative learning for talented students. *Journal for the Education of the Gifted*, *14*(1), 9-27.

Robinson, A. (2003a). Cooperative learning and high ability students. In Colangelo, N. and Davis, G.A. (Eds) *Handbook of gifted education*, pp.282-292.

Robinson, N. M. (2003b). Two wrongs do not make a right: Sacrificing the needs of gifted students does not solve society's unsolved problems. *Journal for the Education of the Gifted*, *26*(4), 251-273.

Robinson, N. M. (2004). Effects of academic acceleration on the social-emotional status of gifted students. In Colangelo et al. (2004): *A nation deceived: How schools hold back America's brightest students*, *2*, 59-67.

Robinson, N.M., Zigler, E. and Gallagher, J.J. (2000). Two tails of the normal curve: Similarities and differences in the study of mental retardation and giftedness. *American Psychologist*, *55*(12), p.1413.

Rogers, K.B. (2002). Grouping the gifted and talented: Questions and answers. *Roeper Review*, *24*(3), pp.103-107.

Rogers, K. B. (2004). The academic effects of acceleration. In Colangelo et al. (2004) (Eds): *A nation deceived: How schools hold back America's brightest students*, *2*, 47-57.

Rogers, K.B. (2007). Lessons learned about educating the gifted and talented: A synthesis of the research on educational practice. *Gifted child quarterly*, *51*(4), pp.382-396.

Roller, M. R., & Lavrakas, P. J. (2015). *Applied qualitative research design: A total quality framework approach*. Guilford Publications.

Roper, J. M., & Shapira, J. (2000). *Ethnography in nursing research* (Vol. 1). Sage.

Rothstein, R., Jacobsen, R., & Wilder, T. (2006). 'Proficiency for all'–an oxymoron. *Education week*, *26*(13), 32-44.

Rotigel, J. V. (2003). Understanding the young gifted child: Guidelines for parents, families, and educators. *Early Childhood Education Journal*, *30*(4), 209-214.

Rowley, J. L. (2012). Professional development needs of teachers to identify and cater for gifted students. *Australasian Journal of Gifted Education*, *21*(2), 75.

Rubie-Davies, C. M., Blatchford, P., Webster, R., Koutsoubou, M. and Bassett, P. (2010). Enhancing learning? A comparison of teacher and teaching assistant interactions with pupils. *School Effectiveness and School Improvement*, *21*(4), 429-449.

Salazar, M. (2008). English or nothing: The impact of rigid language policies on the inclusion of humanizing practices in a high school ESL program. *Equity & Excellence in Education*, *41*(3), 341-356.

Sapon-Shevin, M. and Schniedewind, N. (1993). Why (Even) Gifted Children Need Cooperative Learning. *Educational Leadership*, *50*(6), pp.62-63.

Saranli, A. G. (2016). A Neglected Group for Early Intervention: Gifted and Talented Young Children. Developments in Educational Sciences, 696.

Schack, G.D. and Starko, A.J. (1990) Identification of Gifted Students: An Analysis of Criteria Preferred by Preservice Teachers, Classroom Teachers, and Teachers of the Gifted. *Journal for the Education of the Gifted*. Vol.13, No.4 pp.346-363.

Schapiro, M., Schneider, B. H., Shore, B. M., Margison, J. A. and Udvari, S. J. (2009). Competitive goal orientations, quality, and stability in gifted and other adolescents' friendships: A test of Sullivan's Theory about the harm caused by rivalry. *Gifted Child Quarterly*, *53*(2), 71-88.

Schofield, J. W. (2010). International evidence on ability grouping with curriculum differentiation and the achievement gap in secondary schools. *Teachers College Record*, *112*(5), 1492-1528.

Scott, D. (2005). Critical realism and empirical research methods in education. *Journal of Philosophy of Education*, *39*(4), pp.633-646.

Scottish Executive (2002). *Review of Provision of Educational Psychology Services in Scotland*, Edinburgh: The Stationery Office.

Scottish Executive (2004). A Curriculum for Excellence. The Curriculum Review Group. Published 1 November 2004. Available at: https://www2.gov.scot/Publications/2004/11/20178/45862 (last accessed 08/11/2018).

Scottish Government (2003). National Priorities in Education: Performance Report 2003. Inclusion and Equality. National Priority 3. Published on the 16th December, 2003. Available at: https://www2.gov.scot/Publications/2003/12/18654/30575 (last accessed 08/11/2018).

Scottish Government (2005). *Supporting children's learning: code of practice*. Edinburgh: Her Majesty's Stationary Office. Available online at: https://www2.gov.scot/Publications/2005/08/15105817/58187 (last accessed 08/11/2018).

Scottish Government (2008). Curriculum for Excellence: Building the Curriculum 3. A Framework for Learning and Teaching. Edinburgh. Available online at: https://www2.gov.scot/resource/doc/226155/0061245.pdf (last accessed: 08/11/2018)

Scottish Office Education and Industry Department (1993). *HMI Report: The Education of Able Pupils P6-S2*. Her Majesty's Stationary Office: Edinburgh.

Scottish Office Education and Industry Department (1996). *Achievement for All: a report of HM Inspectors of Schools* (Edinburgh, SOEID).

Scottish Office Social Work Services Group (1997). *Scotland's Children: The Children (Scotland) Act 1995, Regulations and Guidance, Volume 1: Support and Protection for Children and their Families*, Edinburgh: The Stationary Office

Scottish Parliament (2004). *Education (Additional Support for Learning) Act.* Edinburgh: The Scottish Government, The Stationery Office. Available online at: https://www.legislation.gov.uk/asp/2004/4/contents (last accessed: 08/11/2018).

Schroth, S. T., & Helfer, J. A. (2008). Identifying gifted students: Educator beliefs regarding various policies, processes, and procedures. *Journal for the Education of the Gifted*, *32*(2), 155-179.

Sekowski, A. and Łubianka, B. (2014). Education of gifted students–an axiological perspective. *Gifted Education International*, *30*(1), 58-73.

Seawright, J. and Gerring, J. (2008). Case selection techniques in case study research: A menu of qualitative and quantitative options. *Political research quarterly*, *61*(2), pp.294-308.

Shannak, R. and Aldhmour, F. (2009). Grounded theory as a methodology for theory generation in information systems research. *European journal of economics, finance and administrative sciences*, *15*(15), 32-50.

Sharples, J., Webster, R., & Blatchford, P. (2015). Making best use of teaching assistants: Guidance report.

Shaw, I., Newton, D. P., Aitkin, M. and Darnell, R. (2003). Do Ofsted inspections of secondary schools make a difference to GCSE results?. *British educational research journal*, *29*(1), 63-75.

Shechtman, Z. and Silektor, A. (2012). Social competencies and difficulties of gifted children compared to nongifted peers. *Roeper Review*, *34*(1), pp.63-72.

Sheppard, M. (1998). Practice validity, reflexivity and knowledge for social work. *The British Journal of Social Work*, *28*(5), 763-781.

Siegle, D. (2008). The time is now to stand up for gifted education: 2007 NAGC Presidential Address. *Gifted Child Quarterly*, *52*(2), 111-113.

Siegle, D., Moore, M., Mann, R. L. And Wilson, H. E. (2010). Factors that influence in-service and preservice teachers' nominations of students for gifted and talented programs. *Journal for the Education of the Gifted*, *33*(3), 337-360.

Siegle, D. and McCoach, D. B. (2005). Making a difference: Motivating gifted students who are not achieving. *Teaching exceptional children*, *38*(1), 22-27.

Siegle, D. and Powell, T. (2004). Exploring teacher biases when nominating students for gifted programs. *Gifted Child Quarterly*, *48*(1), 21-29.

Silverman, D. (2013). *Doing qualitative research: A practical handbook*. SAGE Publications Limited.

Simonton, D.K. and Song, A.V. (2009). Eminence, IQ, physical and mental health, and achievement domain: Cox's 282 geniuses revisited. *Psychological Science*, *20*(4), pp.429-434.

Slavin, R. E. (1990). Achievement effects of ability grouping in secondary schools: A best-evidence synthesis. *Review of educational research*, *60*(3), 471-499.

Smith, C. (2005). *Teaching Gifted and Talented Pupils in the Primary School: A Practical Guide.* SAGE Publications

Smith, T. and Noble, M. (1995) *Education Divides: Poverty and Schooling in the 1990s*. Poverty publication, 90. Child Poverty Action Group, Oxford.

Smith, C. M. and Sutherland, M. J. (2003). Setting or mixed ability? Teachers' views of the organisation of pupils for learning. *Journal of Research in Special Educational Needs*, *3*(3), 141-146.

Smith, C.M. and Sutherland, M.J. (2006). Setting or mixed ability? Pupils' views of the organisational arrangement in their school. *Journal of Research in Special Educational Needs*, *6*(2), pp.69-75.

Smithers, A. and Robinson, P. (2012). *Educating the Highly Able*. London: The Sutton Trust

Southern, W. T. and Jones, E. D. (2004). Types of acceleration: Dimensions and issues. In Colangelo et al. (2004) (Eds): *A nation deceived: How schools hold back America's brightest students*, *2*, 5-12.

Stack, N. and Sutherland, M. (2014). Seeing beyond statistics: Examining the potential for disjuncture between legislation, policy and practice in meeting the needs of highly able Scottish students. *Psihološka obzorja*, *23*, pp.145-154.

Stake R. (1995). *The Art of Case Study Research*, Sage Publishers, Thousand Oaks, CA.

Stake, R. E. (2013). *Multiple case study analysis*. Guilford Press.

Stanley, G. K. and Baines, L. (2002). Celebrating mediocrity? How schools shortchange gifted students. *Roeper Review*, *25*(1), 11-13.

Stein, G. and Poole, P. (1997). Meeting the interests and needs of gifted children: A strategy for teaching and learning. *Early Child Development and Care*, *130*(1), 13-19.

Steiner Waldorf Schools Fellowship ® Website. https://www.steinerwaldorf.org. Accessed 16 July 2019

Steiner, H. H. and Carr, M. (2003). Cognitive development in gifted children: Toward a more precise understanding of emerging differences in intelligence. *Educational Psychology Review*, *15*(3), 215-246.

Steinmetz, G. (2004). Odious comparisons: Incommensurability, the case study, and "small N's" in sociology. *Sociological theory*, *22*(3), pp.371-400.

Sternberg, R. J. (1985). Implicit theories of intelligence, creativity, and wisdom. *Journal of personality and social psychology*, *49*(3), 607.

Sternberg, R. J. (1990). *Metaphors of mind: Conceptions of the nature of intelligence*. Cambridge University Press.

Sternberg, R. J. (1996). The sound of silence: A nation responds to its gifted. *Roeper Review*, *18*(3), 168-172.

Sternberg, R. J. (1997). The concept of intelligence and its role in lifelong learning and success. *American psychologist*, *52*(10), 1030.

Sternberg, R. J. (2010). Assessment of gifted students for identification purposes: New techniques for a new millennium. *Learning and Individual Differences*, *20*(4), 327-336.

Sternberg, R. J., and Davidson, J. E. (Eds.). (2005). *Conceptions of giftedness*. Cambridge University Press.

Stoeger, H. (2009). The history of giftedness research. In *International handbook on giftedness* (pp. 17-38). Springer, Dordrecht.

Stormont, M., Stebbins, M. S. and Holliday, G. (2001). Characteristics and educational support needs of underrepresented gifted adolescents. *Psychology in the Schools*, *38*(5), 413-423.

Subotnik, R. F. (2003). A developmental view of giftedness: From being to doing. *Roeper Review*, *26*(1), 14-15.

Subotnik, R.F., Olszewski-Kubilius, P. and Worrell, F.C. (2011). Rethinking giftedness and gifted education: A proposed direction forward based on psychological science. *Psychological science in the public interest*, *12*(1), pp.3-54.

Sukhnandan, L., & Lee, B. (1998). Streaming, setting and grouping by ability. *Slough: NF ER*.

Sutherland, M. (2003). Identification of more able pupils: a pilot survey of Scottish schools. *Gifted Education International*, *18*(2), 209-217.

Sutherland, M. (2008). *Developing the gifted and talented young learner*. SAGE

Sutherland, M. (2011). Highly able pupils in Scotland: Making a curriculum change count. *Zbornik Instituta za pedagoska istrazivanja*, *43*(2), 195-207.

Sutherland, M. (2012). Paradigmatic shift or tinkering at the edges?. *High Ability Studies*, *23*(1), pp.109-111.

Sutherland, M., and Stack, N. (2012). *We Count Too: Highly Able Pupils in Scottish Schools.* Scottish Network for Able Pupils

Sutherland, M. and Stack, N. (2014). Ability as an additional support need: Scotland's inclusive approach to gifted education. *Centre for Educational Policy Studies Journal*, *4*(3), 73-87.

Taber, K. S. (2010). Challenging gifted learners: General principles for science educators; and exemplification in the context of teaching chemistry. *Science Education International*, *21*(1), 5-30.

Teaching Schools Council (2016). Effective Primary Teaching Practice. Available online at: https://tscouncil.org.uk/resources/effective-primary-teaching-practice-2016/.

Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of mixed methods research*, *1*(1), 77-100.

Terman, L. M. (1916). The uses of intelligence tests. *The measurement of intelligence*, 3-21.

The City of Edinburgh Council (2001). *A framework for Gifted and Talented Pupils*. Item No4. Edinburgh.

The Plowden Report (1967). Children and their Primary Schools. A Report of the Central Advisory Council for Education. London: Her Majesty's Stationery Office, 1967.

Thomas, G. (2009) *How to do your Research Project*. London, Los Angeles, New Delhi, Singapore and Washington DC: SAGE.

Tieso, C.L. (2003). Ability grouping is not just tracking anymore. *Roeper Review*, *26*(1), pp.29-36.

Tomlinson, C. A. (2000). Reconcilable differences: Standards-based teaching and differentiation. *Educational leadership*, *58*(1), 6-13.

Tomlinson, S. (2005). *Education in a post welfare society*. McGraw-Hill Education (UK).

Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C. M., Moon, T. R., Brimijoin, K., Conover, L.A. and Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of literature. *Journal for the Education of the Gifted*, *27*(2-3), 119-145.

Topping, K. J. and Ehly, S. W. (2001). Peer assisted learning: A framework for consultation. *Journal of Educational and Psychological Consultation*, *12*(2), 113-132.

Uhrmacher, P.B. (1995). Uncommon schooling: A historical look at Rudolf Steiner, anthroposophy, and Waldorf education. *Curriculum Inquiry*, *25*(4), pp.381-406.

Van den Bergh, L., Denessen, E., Hornstra, L., Voeten, M. and Holland, R. W. (2010). The implicit prejudiced attitudes of teachers: Relations to teacher expectations and the ethnic achievement gap. *American Educational Research Journal*, *47*(2), 497-527.

VanTassel-Baska, J. (1992). Educational decision making on acceleration and grouping. *Gifted Child Quarterly*, *36*(2), 68-72.

VanTassel-Baska, J. (2008, July). What works in curriculum for the gifted. In *Keynote address at the Asia Pacific Conference on the Gifted, Hong Kong, July* (Vol. 18, p. 2008).

VanTassel-Baska, J., Feng, A. X. and De Brux, E. (2007). A study of identification and achievement profiles of performance task-identified gifted students over 6 years. *Journal for the Education of the Gifted*, *31*(1), 7-34.

VanTassel-Baska, J. and Brown, E. F. (2007). Toward best practice: An analysis of the efficacy of curriculum models in gifted education. *Gifted Child Quarterly*, *51*(4), 342-358.

VanTassel-Baska, J. and Stambaugh, T. (2005). Challenges and possibilities for serving gifted learners in the regular classroom. *Theory Into Practice*, *44*(3), 211-217.

VanTassel-Baska, J. and Wood, S. (2010). The integrated curriculum model (ICM). *Learning and individual differences*, *20*(4), 345-357.

VanTassel-Baska, J., Zuo, L., Avery, L. D. and Little, C. A. (2002). A curriculum study of gifted-student learning in the language arts. *Gifted Child Quarterly*, *46*(1), 30-44.

Vogl, K. and Preckel, F. (2014). Full-time ability grouping of gifted students: Impacts on social self-concept and school-related attitudes. *Gifted Child Quarterly*, *58*(1), 51-68.

Walters, S. (2007). 'Case study' or 'ethnography'? Defining terms, making choices and defending the worth of a case. In *Methodological developments in ethnography* (pp. 89-108). Emerald Group Publishing Limited.Watt, D. (2007). On Becoming a Qualitative Researcher: The Value of Reflexivity. *Qualitative Report*, *12*(1), 82-101.

Webb, E. (1998). Children and the inverse care law. *BMJ: British Medical Journal*, 316(7144), 1588.

Webb, J. T. (2014). Gifted children and adults. Neglected areas of practice. *The National Register of Health Service Psychologists. The Register Report*, 18-27.

Weedon, E. and Riddell, S. (2009). Additional support needs and approaches to dispute resolution: the perspectives of Scottish parents. *Scottish Educational Review*, *41*(12), 62-81.

Wellisch, M. and Brown, J. (2012). An integrated identification and intervention model for intellectually gifted children. *Journal of Advanced Academics*, *23*(2), 145-167.

West, A. (2010). High stakes testing, accountability, incentives and consequences in English schools. *Policy & politics*, *38*(1), pp.23-39.

Whitty, G. and Power, S. (2000). Marketization and privatization in mass education systems. *International Journal of Educational Development*, *20*(2), 93-107.

Wiggins, A. and Tymms, P. (2002). Dysfunctional effects of league tables: a comparison between English and Scottish primary schools. *Public money and management*, *22*(1), 43-48.

Willig, C. (2001) *Introducing qualitative research in psychology. Adventures in Theory and Method.* Buckingham: Open University Press.

Willig, C. (2008). *Introducing qualitative research in psychology*. England: Maidenhead.

Willig, C. and Stainton-Rogers, W. (2008). Qualitative research in psychology. *Maidenhead: Open University Press. Google Scholar*.

Woods, P., Ashley, M. and Woods, G. (2005). *Steiner schools in England*. London: DfES.

Worrell, F. C. and Erwin, J. O. (2011). Best practices in identifying students for gifted and talented education programs. *Journal of Applied School Psychology*, *27*(4), 319-340.

Wynn Jr, D. and Williams, C.K. (2012). Principles for conducting critical realist case study research in information systems. *MIS quarterly*, pp.787-810.

Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, *20*(2), 134-152.

Yin, R.K. (1981). The case study crisis: Some answers. *Administrative science quarterly*, *26*(1), pp.58-65.

Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). London: Sage.

Yin, R. K. (2009). *Case study research: Design and methods*. 4th edition. London and Singapore: Sage.

Yonezawa, S. and Jones, M. (2006). Students' perspectives on tracking and detracking. *Theory into practice*, *45*(1), pp.15-23.

Ziegler, A. and Phillipson, S.N. (2012). Towards a systemic theory of gifted education. *High Ability Studies*, *23*(1), pp.3-30.

Ziegler, A. and Stoeger, H. (2003). Identification of underachievement with standardized tests, student, parental and teacher assessments. An empirical study on the agreement among various diagnostic sources. *Gifted and Talented International*, 18, 87-94.